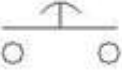
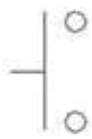
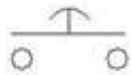
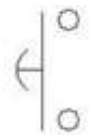


Push Buttons

Horizontal Symbol	Vertical Symbol	Description
 HPB11	 VPB11	Push Button Normally Open
 HPB12	 VPB12	Push Button Normally Closed
 HPB11M	 VPB11M	Mushroom Head Normally Open

		Mushroom Head Normally Closed
HPB12M	VPB12M	
		Illuminated Push Button Normally Open
HPB11L	VPB11L	
		Illuminated Push Button Normally Closed
HPB12L	VPB12L	
		Illuminated Mushroom Head Normally Open
HPB11ML	VPB11ML	
		Illuminated Mushroom Head Normally Closed
HPB12ML	VPB12ML	



HPB21



VPB21

2nd+ Normally Open Contact



HPB22



VPB22

2nd+ Normally Closed Contact



HPB2R



VPB2R

2nd+ Red Light



HPB2G



VPB2G

2nd+ Green Light



HPB2A



VPB2A

2nd+ Amber Light



HPB2Y



VPB2Y

2nd+ Yellow Light



HPB2B



VPB2B

2nd+ Blue Light



HPB2W



VPB2W

2nd+ White Light



HPB2C



VPB2C

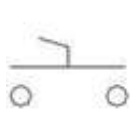
2nd+ Clear Light

NOTE Lights will receive text to indicate the color at the time of insertion.

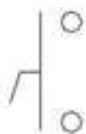
Selector Switches

Selector Switches

Horizontal Symbol	Vertical Symbol	Description
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HSS112



VSS112

2 Position Maintain, Normally Open

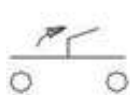


HSS122



VSS122

2 Position Maintain, Normally Closed



HSS112L



VSS112L

2 Position Normally Open Return From Left

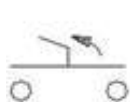


HSS122L



VSS122L

2 Position Normally Closed Return From Left



HSS112R



VSS112R

2 Position Normally Open Return From Right

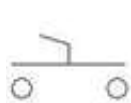


HSS122R

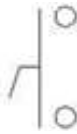


VSS122R

2 Position Normally Closed Return From Right

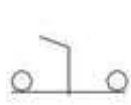


HSS113



VSS113

3 Position Normally Open

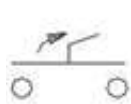


HSS123



VSS123

3 Position Normally Closed



HSS113L



VSS113L

3 Position Normally Open Return From Left



HSS123L



VSS123L

3 Position Normally Closed Return From Left



HSS113R



VSS113R

3 Position Normally Open Return From Right

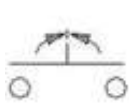


HSS123R



VSS123R

3 Position Normally Closed Return From Right



HSS113B



VSS113B

3 Position Normally Open Return From Both

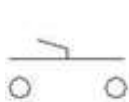


HSS123B



VSS123B

3 Position Normally Closed Return From Both

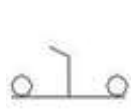


HSS114



VSS114

4 Position Normally Open

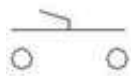


HSS124



VSS124

4 Position Normally Closed



HSS116



VSS116

6 Position Normally Open



HSS126



VSS126

6 Position Normally Closed



HSS118



VSS118

8 Position Normally Open

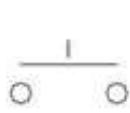


HSS128



VSS128

8 Position Normally Closed



HSS21



VSS21

2nd+ Normally Open Contact



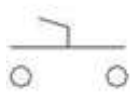
HSS22

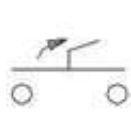


VSS22

2nd+ Normally Closed Contact

Illuminated Selector Switches

Horizontal Symbol	Vertical Symbol	Description
 HSS112I	 VSS112I	2 Position Normally Open
 HSS122I	 VSS122I	2 Position Normally Closed

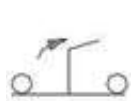


HSS112LI



VSS112LI

2 Position Normally Open Return From Left



HSS122LI



VSS122LI

2 Position Normally Closed Return From Left



HSS112RI



VSS112RI

2 Position Normally Open Return From Right



HSS122RI



VSS122RI

2 Position Normally Closed Return From Right

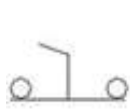


HSS113I



VSS113I

3 Position Normally Open

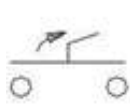


HSS123I



VSS123I

3 Position Normally Closed

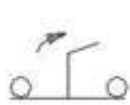


HSS113LI



VSS113LI

3 Position Normally Open Return From Left

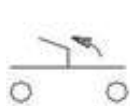


HSS123LI



VSS123LI

3 Position Normally Closed Return From Left



HSS113RI



VSS113RI

3 Position Normally Open Return From Right



HSS123RI



VSS123RI

3 Position Normally Closed Return From Right

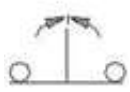


HSS113BI

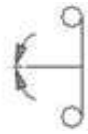


VSS113BI

3 Position Normally Open Return From Both



HSS123BI



VSS123BI

3 Position Normally Closed Return From Both



HSS2R



VSS2R

Red Light



HSS2G



VSS2G

Green Light

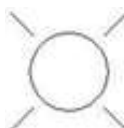


HSS2A



VSS2A

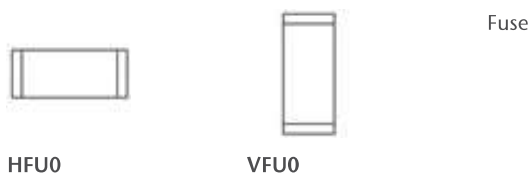
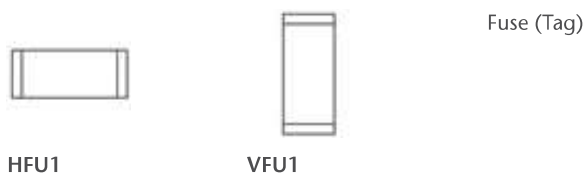
Amber Light

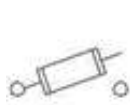
		Yellow Light
HSS2Y	VSS2Y	
		Blue Light
HSS2B	VSS2B	
		White Light
HSS2W	VSS2W	
		Clear Light
HSS2C	VSS2C	

Fuses, Circuit Breakers, Transformers

Fuses and Transformers

Horizontal Symbol	Vertical Symbol	Description





HDS21FR



VDS21FR

2nd+ Fuse Switch(Right)



HDS21FL



VDS21FL

2nd+ Fuse Switch (Left)



HXF1



VXF1

Transformer

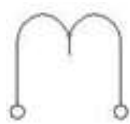


HXF1D



VXF1D

Transformer Dual

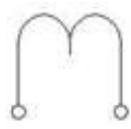


HXF1CT

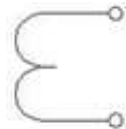


VXF1CT

Circuit Transformer



HXF1PT



VXF1PT

Potential Transformer

Circuit Breakers and Disconnects

Horizontal Symbol	Vertical Symbol	Description
A horizontal symbol for a 1-pole circuit breaker (HCB1). It consists of a horizontal line with two small circles at each end. A vertical line extends upwards from the center of the horizontal line, and a curved line connects the top of this vertical line to the center of the horizontal line, forming a shape similar to a stylized 'm' or a bridge.	A vertical symbol for a 1-pole circuit breaker (VCB1). It consists of a vertical line with two small circles at each end. A horizontal line extends to the right from the center of the vertical line, and a curved line connects the top of this horizontal line to the center of the vertical line, forming a shape similar to a stylized 'E' or a bridge.	Circuit Breaker 1 Pole
A horizontal symbol for a thermal circuit breaker (HCB11TH). It consists of a horizontal line with two small circles at each end. A vertical line extends upwards from the center of the horizontal line, and a curved line connects the top of this vertical line to the center of the horizontal line, forming a shape similar to a stylized 'm' or a bridge.	A vertical symbol for a thermal circuit breaker (VCB11TH). It consists of a vertical line with two small circles at each end. A horizontal line extends to the right from the center of the vertical line, and a curved line connects the top of this horizontal line to the center of the vertical line, forming a shape similar to a stylized 'E' or a bridge.	Thermal Circuit Breaker
A horizontal symbol for a motor circuit protector (HCB11M). It consists of a horizontal line with two small circles at each end. A vertical line extends upwards from the center of the horizontal line, and a curved line connects the top of this vertical line to the center of the horizontal line, forming a shape similar to a stylized 'm' or a bridge.	A vertical symbol for a motor circuit protector (VCB11M). It consists of a vertical line with two small circles at each end. A horizontal line extends to the right from the center of the vertical line, and a curved line connects the top of this horizontal line to the center of the vertical line, forming a shape similar to a stylized 'E' or a bridge.	Motor Circuit Protector

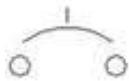


HCB11ML

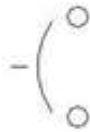


VCB11ML

Motor Circuit Protector with Fuse



HCB2



VCB2

2nd+ Circuit Breaker 1 Pole



HCB21TH



VCB21TH

2nd+ Thermal Circuit Breaker



HCB21M



VCB21M

2nd+ Motor Circuit Protector



HCB21ML

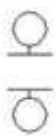


VCB21ML

2nd+ Motor Circuit Protector with Fuse



HCB21IT



VCB21IT

Circuit Breaker Auxiliary Contact Normally Open

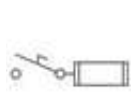


HDS11



VDS11

Disconnect Switch



HDS11F



VDS11F

Fused Disconnect Switch



HDS21IT

Disconnect Switch Auxiliary Contact Normally Open

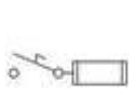


HDS21



VDS21

2nd+ Disconnect Switch



HDS21F

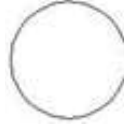


VDS21F

2nd+ Fused Disconnect Switch

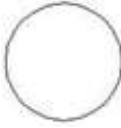
Relays and Contacts

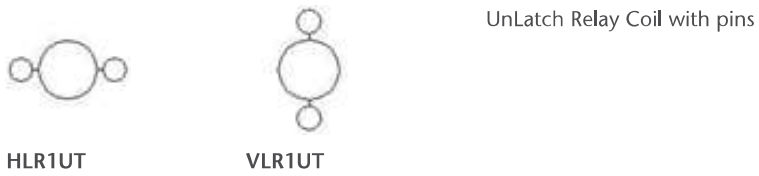
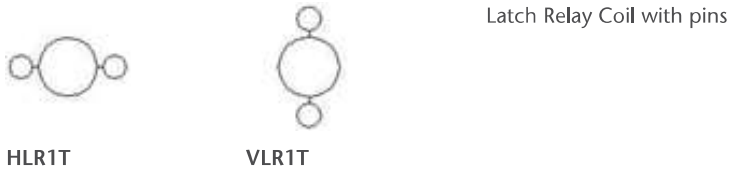
Relays and Contacts

Horizontal Symbol	Vertical Symbol	Description
 HCR1	 VCR1	Relay Coil
 HCR21	 VCR21	Relay Normally Open Contact
 HCR22	 VCR22	Relay Normally Closed Contact

		Standard Coil with Pins
HCR1T	VCR1T	
		Relay Normally Open Contact with Pins
HCR21T	VCR21T	
		Relay Normally Closed Contact with Pins
HCR22T	VCR22T	

Latch Relay Coils

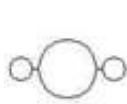
Horizontal Symbol	Vertical Symbol	Description
		Latch Relay Coil
HLR1	VLR1	



Timers

Time Delay Relays

Horizontal Symbol	Vertical Symbol	Description
		ON Delay Coil
HTD1N	VTD1N	

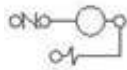


HTD1NT



VTD1NT

ON Delay Coil with Pins

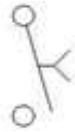


HTD1NM

ON Delay Starter



HTD21N



VTD21N

ON Delay Normally Open - TC



HTD22N



VTD22N

ON Delay Normally Closed - TO



HTD21NT



VTD21NT

ON Delay Normally Open - TC with Pins



HTD22NT



VTD22NT

ON Delay Normally Closed - TO with Pins



HTD21I



VTD21I

Instantaneous Normally Open

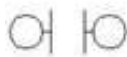


HTD22I



VTD22I

Instantaneous Normally Closed



HTD21IT



VTD21IT

Instantaneous Normally Open with Pins



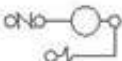
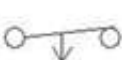
HTD22IT



VTD22IT

Instantaneous Normally Closed with Pins

OFF-Delay Timers

Horizontal Symbol	Vertical Symbol	Description
 HTD1F	 VTD1F	OFF Delay Coil
 HTD1FT	 VTD1FT	OFF Delay Coil with Pins
 HTD1FM		OFF Delay Starter
 HTD21F	 VTD21F	OFF Delay Normally Open-TO
 HTD22F	 VTD22F	OFF Delay Normally Closed-TC

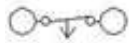


HTD21FT

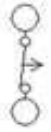


VTD21FT

OFF Delay Normally Open-TO with Pins



HTD22FT



VTD22FT

OFF Delay Normally Closed-TC with Pins



HTD21IF



VTD21IF

Instantaneous Normally Open



HTD22IF



VTD22IF

Instantaneous Normally Closed



HTD21ITF



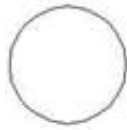
VTD21ITF

Instantaneous Normally Open with Pins

		Instantaneous Normally Closed with Pins
HTD22ITF	VTD22ITF	

Motor Control

Horizontal Symbol	Vertical Symbol	Description
		Motor Starter Coil
HMS1	VMS1	
		Motor Starter Coil with Pins
HMS1T	VMS1T	
		Overload
HOL11	VOL11	



HMO13



VMO13

3 Phase Motor



HMS21

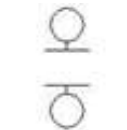


VMS21

2nd+ Starter Contact Normally Open



HMS21T



VMS21T

2nd+ Starter Contact Normally Open with Pins



HOL21



VOL21

2nd+ Overload



HMO12



VMO12

1 Phase Motor



HMS22



VMS22

2nd+ Starter Contact Normally Closed



HMS22T



VMS22T

2nd+ Starter Contact Normally Closed with Pins



HOL21I

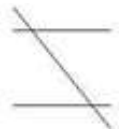


VOL21I

2nd+ Overload Contact Normally Open

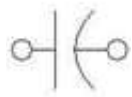


HOL22I



VOL22I

2nd+ Overload Contact Normally Closed



HCA11

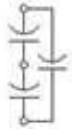


VCA11

KVAR Capacitor

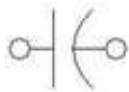


HCA113

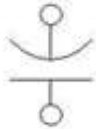


VCA113

3 Phase KVAR



HCA21



VCA21

2nd+ KVAR Capacitor

NOTE Multi-pole devices are constructed using parent and child symbols to adhere to the underlying ladder spacing.

Pilot Lights

Pilot Lights

Horizontal Symbol	Vertical Symbol	Description
		Red Standard
		Green Standard



HLT1A



VLT1A

Amber Standard



HLT1Y



VLT1Y

Yellow Standard



HLT1B



VLT1B

Blue Standard



HLT1W



VLT1W

White Standard



HLT1C



VLT1C

Clear Standard

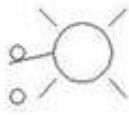


HLT1RP

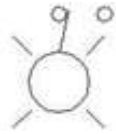


VLT1RP

Red Press To Test

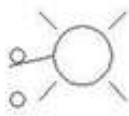


HLT1GP

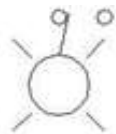


VLT1GP

Green Press To Test

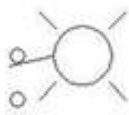


HLT1AP

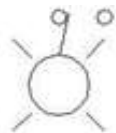


VLT1AP

Amber Press To Test

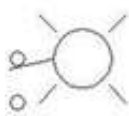


HLT1YP

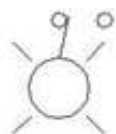


VLT1YP

Yellow Press To Test

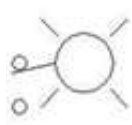


HLT1BP



VLT1BP

Blue Press To Test

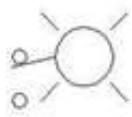


HLT1WP



VLT1WP

White Press To Test



HLT1CP



VLT1CP

Clear Press To Test

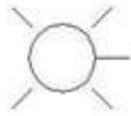
NOTE Lights receive text to indicate the color at the time of insertion.

Master Test Pilot Lights

Horizontal Symbol	Vertical Symbol	Description
A horizontal symbol consisting of a circle with five radiating lines. A horizontal line extends from the left side of the circle, ending in a small circle.	A vertical symbol consisting of a circle with five radiating lines. A vertical line extends from the top of the circle, ending in a small circle.	Red Master Test
A horizontal symbol consisting of a circle with five radiating lines. A horizontal line extends from the left side of the circle, ending in a small circle.	A vertical symbol consisting of a circle with five radiating lines. A vertical line extends from the top of the circle, ending in a small circle.	Green Master Test



HLT1AM



VLT1AM

Amber Master Test



HLT1YM



VLT1YM

Yellow Master Test



HLT1BM



VLT1BM

Blue Master Test



HLT1WM



VLT1WM

White Master Test



HLT1CM

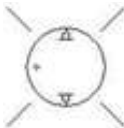
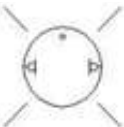
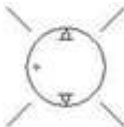
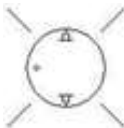


VLT1CM

Clear Master Test

NOTE Lights receive text to indicate the color at the time of insertion.

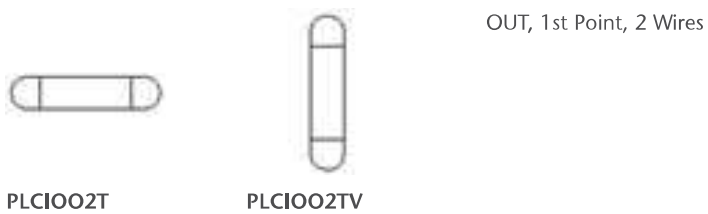
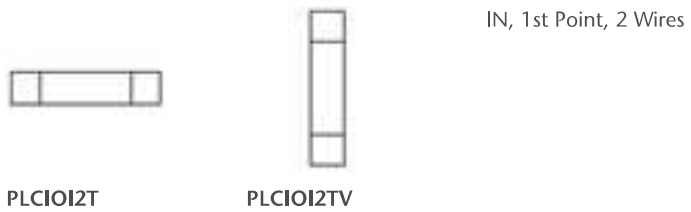
Neon Pilot Lights

Horizontal Symbol	Vertical Symbol	Description
 HLT1RN	 VLT1RN	Red Standard
 HLT1AN	 VLT1AN	Amber Standard
 HLT1CN	 VLT1CN	Clear Standard

NOTE Lights receive text to indicate the color at the time of insertion.

PLC I/O

Horizontal Symbol	Vertical Symbol	Description
-------------------	-----------------	-------------



		IN, 2nd+ Child, 2 Wires
PLCIOI2	PLCIOI2V	

		OUT, 2nd+ Child, 1 Wire
PLCIOO1	PLCIOO1V	

		OUT, 2nd+ Child, 2 Wires
PLCIOO2	PLCIOO2V	

Terminals and Connectors

Terminals

Horizontal Symbol	Vertical Symbol	Description
		Square
HT0_01	VT0_01	



HT0W01



VT0W01

Square with Wire Number



HT0001



VT0001

Square with Terminal Number



HT1001



VT1001

Square with Wire Number Change



HT0_02



VT0_02

Round



HT0W02

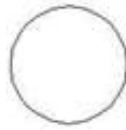


VT0W02

Round with Wire Number



HT0002

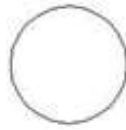


VT0002

Round with Terminal Number



HT1002



VT1002

Round with Wire Number Change



HT0_03



VT0_03

Hexagon



HT0W03



VT0W03

Hexagon with Wire Number



HT0003



VT0003

Hexagon with Terminal Number



HT1003



VT1003

Hexagon with Wire Number Change



HT0_04



VT0_04

Diamond



HT0W04



VT0W04

Diamond with Wire Number



HT0004



VT0004

Diamond with Terminal Number

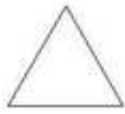


HT1004

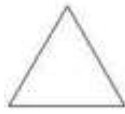


VT1004

Diamond with Wire Number Change

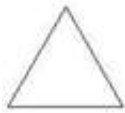


HT0_05

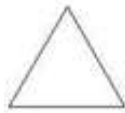


VT0_05

Triangle

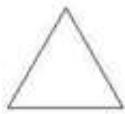


HT0W05

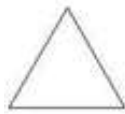


VT0W05

Triangle with Wire Number



HT0005

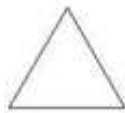


VT0005

Triangle with Terminal Number



HT1005



VT1005

Triangle with Wire Number Change

In-Line Wire Labels

Horizontal Symbol	Vertical Symbol	Description
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In-Line Wire Label

HT0_LGENER-
IC

VT0_LGENER-
IC

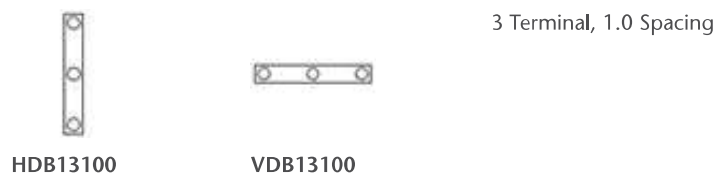
Wire Number Copy

HT0_WGENER-
IC

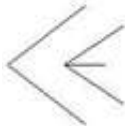
VT0_WGENER-
IC

Power Distribution Blocks

Horizontal Symbol	Vertical Symbol	Description
		3 Terminal, 0.5 Spacing
HDB1350	VDB1350	
		3 Terminal, 0.75 Spacing
HDB1375	VDB1375	



Connectors - No Wirenumber Changes

Connectors - No Wirenumber Changes		
Horizontal Symbol	Vertical Symbol	Description
 HC01PJ	 VC01PJ	Plug/Jack
 HC01JP	 VC01JP	Jack/Plug
 HC01PJ1	 VC01PJ1	Plug/Jack (Combined Tag-Pin)

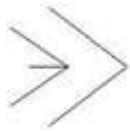


HC01JP1



VC01JP1

Jack/Plug (Combined Tag-Pin)

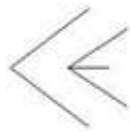


HC02PJ



VC02PJ

2nd+ Plug/Jack



HC02JP



VC02JP

2nd+ Jack/Plug



HC02PJ1



VC02PJ1

2nd+ Plug/Jack (Combined Tag-Pin)



HC02JP1



VC02JP1

2nd+ Jack/Plug (Combined Tag-Pin)

Connectors - No Wirenumber Changes - Spare/Single Side

Horizontal Symbol	Vertical Symbol	Description
 HC01P_ 	 VC01P_ 	Plug Right or up
 HC01_J 	 VC01_J 	Jack Left or Down
 HC01P_1 	 VC01P_1 	Plug Right or up (Combined tag/pin)
 HC01_J1 	 VC01_J1 	Jack Left or Down (Combined)



HC02P_



VC02P_

2nd+ Plug Right or up



HC02_J



VC02_J

2nd+ Jack Left or Down



HC02P_1



VC02P_1

2nd+ Plug Right or up (Combined)



HC02_J1



VC02_J1

2nd+ Jack Left or Down (Combined)



HC01J_



VC01J_

Jack Right or up

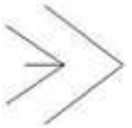
		Plug Left or Down
HC01_P	VC01_P	
		Jack Right or up (Combined)
HC01J_1	VC01J_1	
		Plug Left or Down (Combined)
HC01_P1	VC01_P1	
		2nd+ Jack Right or up
HC02J_	VC02J_	
		2nd+ Plug Left or Down
HC02_P	VC02_P	

		2nd+ Jack Right or up (Combined)
HC02J_1	VC02J_1	

		2nd+ Plug Left or Down (Combined)
HC02_P1	VC02_P1	

Connectors - Wirenumber Changes

Connectors - Wirenumber Changes

Horizontal Symbol	Vertical Symbol	Description
		Plug/Jack
HCN1PJ	VCN1PJ	
		Jack/Plug
HCN1JP	VCN1JP	



HCN2PJ



VCN2PJ

2nd+ Plug/Jack



HCN2JP



VCN2JP

2nd+ Jack/Plug

Connectors - Wirenumber Changes - Spare/Single Side

Horizontal Symbol	Vertical Symbol	Description
		Plug Right or up
		Jack Left or Down



HCN1P_1



VCN1P_1

Plug Right or up (Combined tag/pin)



HCN1_J1



VCN1_J1

Jack Left or Down (Combined)



HCN2P_



VCN2P_

2nd+ Plug Right or up



HCN2_J



VCN2_J

2nd+ Jack Left or Down



HCN2P_1



VCN2P_1

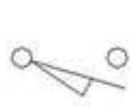
2nd+ Plug Right or up (Combined)



		2nd+ Jack Right or up
HCN2J_	VCN2J_	
		2nd+ Plug Left or Down
HCN2_P	VCN2_P	
		2nd+ Jack Right or up (Combined)
HCN2J_1	VCN2J_1	
		2nd+ Plug Left or Down (Combined)
HCN2_P1	VCN2_P1	

Limit Switches

Horizontal Symbol	Vertical Symbol	Description



HLS11



VLS11

Limit Switch Normally Open



HLS12



VLS12

Limit Switch Normally Closed



HLS11H



VLS11H

Limit Switch Normally Open Held Closed



HLS12H



VLS12H

Limit Switch Normally Closed Held Open

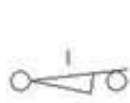


HLS21



VLS21

2nd+ Normally Open Contact



HLS22



VLS22

2nd+ Normally Closed Contact



HLS21H



VLS21H

2nd+ Normally Open Contact Held Closed



HLS22H



VLS22H

2nd+ Normally Closed Contact Held Open

Pressure and Temperature Switches

Horizontal Symbol

Vertical Symbol

Description

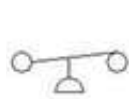


HPS11



VPS11

Pressure Switch, Normally Open



HPS12



VPS12

Pressure Switch, Normally Closed

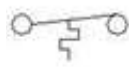


HTS11



VTS11

Temperature Switch, Normally Open



HTS12

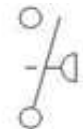


VTS12

Temperature Switch, Normally Closed

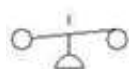


HPS21

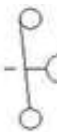


VPS21

2nd+ Pressure Normally Open Contact

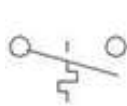


HPS22



VPS22

2nd+ Pressure Normally Closed Contact

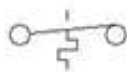


HTS21



VTS21

2nd+ Temperature Normally Open Contact



HTS22



VTS22

2nd+ Temperature Normally Closed Contact

Flow and Level Switches

Horizontal Symbol

Vertical Symbol

Description



HFS11



VFS11

Flow Switch Normally Open

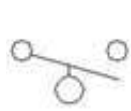


HFS12



VFS12

Flow Switch Normally Closed



HFL11



VFL11

Level Switch Normally Open

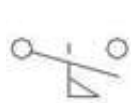


HFL12



VFL12

Level Switch Normally Closed



HFS21



VFS21

2nd+ Flow Normally Open Contact

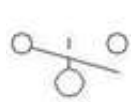


HFS22



VFS22

2nd+ Flow Normally Closed Contact

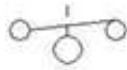


HFL21



VFL21

2nd+ Level Normally Open Contact



HFL22



VFL22

2nd+ Level Normally Closed Contact

Miscellaneous Switches

Miscellaneous Switches

Horizontal Symbol	Vertical Symbol	Description
		Proximity Switch Normally Open
		Proximity Switch Normally Closed
		2nd+ Proximity Normally Open Contact



HPX22



VPX22

2nd+ Proximity Normally Closed Contact



HFT11



VFT11

Foot Switch Normally Open



HFT12



VFT12

Foot Switch Normally Closed



HFT21



VFT21

2nd+ Foot Normally Open Contact

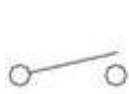


HFT22



VFT22

2nd+ Foot Normally Closed Contact



HTG11



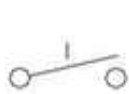
VTG11

Toggle Switch Normally Open



HTG12

Toggle Switch Normally Closed



HTG21



VTG21

2nd+ Toggle Normally Open Contact

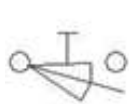


HTG22



VTG22

2nd+ Toggle Normally Closed Contact

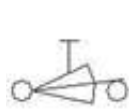


HPC11



VPC11

Pull cord Switch Normally Open



HPC12



VPC12

Pull cord Switch Normally Closed



HPC21



VPC21

2nd+ Pull Cord Normally Open Contact



HPC22

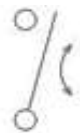


VPC22

2nd+ Pull Cord Normally Closed Contact



HPG11



VPG11

A-Plug Normally Open



HPG12



VPG12

A-Plug Normally Closed



HPG21



VPG21

2nd+ A-Plug Normally Open Contact



HPG22



VPG22

2nd+ A-Plug Normally Closed Contact



HPE11



VPE11

Photo Eye Switch Normally Open



HPE12

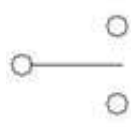


VPE12

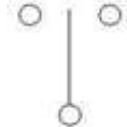
Photo Eye Switch Normally Closed

Single Pole Double Throw Switches

Horizontal Symbol	Vertical Symbol	Description
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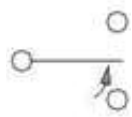


HTG112



VTG112

Single Pole Double Throw Maintained

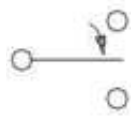


HTG112D



VTG112D

Single Pole Double Throw Return From Down

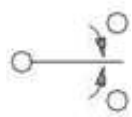


HTG112U



VTG112U

Single Pole Double Throw Return From Up

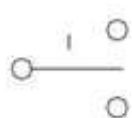


HTG112B

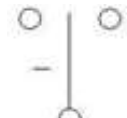


VTG112B

Single Pole Double Throw Return From Both

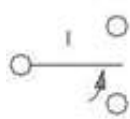


HTG212



VTG212

2nd+ Maintained

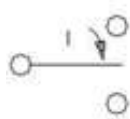


HTG212D



VTG212D

2nd+ Return From Down

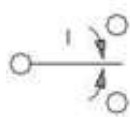


HTG212U



VTG212U

2nd+ Return From Up

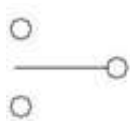


HTG212B

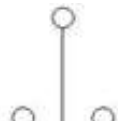


VTG212B

2nd+ Return From Both

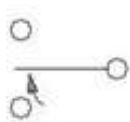


HTG112R



VTG112R

Single Pole Double Throw Maintained

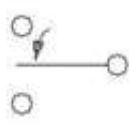


HTG112DR



VTG112DR

Single Pole Double Throw Return From Down

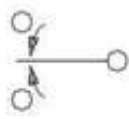


HTG112UR



VTG112UR

Single Pole Double Throw Return From Up

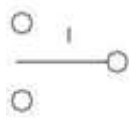


HTG112BR



VTG112BR

Single Pole Double Throw Return From Both

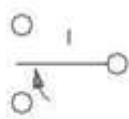


HTG212R



VTG212R

2nd+ Maintained

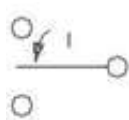


HTG212DR

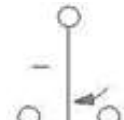


VTG212DR

2nd+ Return From Down

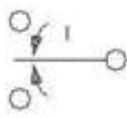


HTG212UR



VTG212UR

2nd+ Return From Up



HTG212BR



VTG212BR

2nd+ Return From Both

Solenoids

Horizontal Symbol	Vertical Symbol	Description
 HSV1	 VSV1	Solenoid
 HSV1M	 VSV1M	Manual Reset Solenoid
 HSV21	 VSV21	Normally Open Contact



HSV22

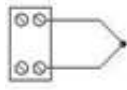


VSV22

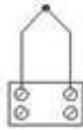
Normally Closed Contact

Instrumentation

Horizontal Symbol	Vertical Symbol	Description
		Thermocouple
		Thermocouple
		Thermocouple with Terminal Board



HTC1RTB



VTC1RTB

Thermocouple with Terminal Board



HBV1M



VBV1M

Ball valve

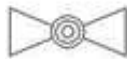


HGV1M



VG1M

Gate valve



HLV1M



VLV1M

Globe valve



HVM1



VVM1

Volt Meter



HAM1



VAM1

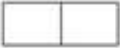
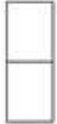
Amp Meter

Miscellaneous

Miscellaneous

Horizontal Symbol	Vertical Symbol	Description
A square with a circle centered on top.	A square with a circle centered on the left side.	Bell
A square with a diagonal line from the top-left corner to the top edge.	A square with a diagonal line from the top-left corner to the left edge.	Buzzer
A square with a trapezoid centered on top.	A square with a trapezoid centered on the left side.	Horn

		Ground
HGND2	VGND2	
		Earth/Ground
HGND1	VGND1	
		Battery
HBA1	VBA1	
		Battery (Flipped)
HBA1R	VBA1R	
		Suppressor (tag)
HSU1	VSU1	

		Suppressor
HSU0	VSU0	
		Enclosure Light
HLT1ENC	VLT1ENC	
		Splice
HSP1001	VSP1001	

Electronics

Horizontal Symbol	Vertical Symbol	Description
		Fixed Resistor
HRE1	VRE1	



HRE1B



VRE1B

Fixed Resistor (Box)



HRE1T



VRE1T

Fixed Resistor with Pins



HRE1TB



VRE1TB

Fixed Resistor (Box) with Pins



HVR1TZ



VVR1TZ

Variable Resistor



HVR1TZR



VVR1TZR

Variable Resistor



HVR1



VVR1

Variable Resistor



HVR1R

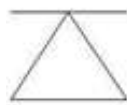


VVR1R

Variable Resistor



HDI1

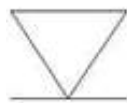


VDI1

Diode



HDI1R



VDI1R

Diode



HDI1T



VDI1T

Diode with Pins



HDI1TR



VDI1TR

Diode with Pins



HDI1Z



VDI1Z

Zener Diode



HDI1ZR

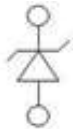


VDI1ZR

Zener Diode



HDI1TZ



VDI1TZ

Zener Diode with Pins



HDI1TZR



VDI1TZR

Zener Diode with Pins

		Capacitor
HCA1	VCA1	

		Capacitor with Pins
HCA1T	VCA1T	

Cable Markers

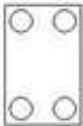
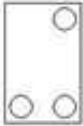
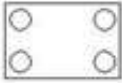
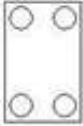
Horizontal Symbol	Vertical Symbol	Description
		Cable Marker
HW01	VW01	
		2nd+ Child Marker
HW02	VW02	

		Extra Marker
HT0_CABLE	VT0_CABLE	
Twisted Pair		
HT0_TW	VT0_TW	

Power Receptacles

Horizontal Symbol	Vertical Symbol	Description
		Duplex Receptacle
HCN1RDUP	VCN1RDUP	
		Single Receptacle
HCN1RSGL	VCN1RSGL	

Generic Device Boxes

Horizontal Symbol	Vertical Symbol	Description
		4 Terminals
HDV1TFL	VDV1TFL	
		3 Terminals
HDV1TC	VDV1TC	
		3 Terminals
HDV1TB	VDV1TB	
		2 Terminals
HDV1T6	VDV1T6	
		4 Terminals
HDV1TF	VDV1TF	



HDV1TE

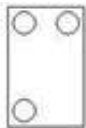


VDV1TE

3 Terminals



HDV1T7



VDV1T7

3 Terminals

Stand-alone Cross-reference Symbols

Symbol	Description
	Source Rectangle
HA2S1_REF	
	Source Hexagon
HA3S1_REF	



Source Ellipse

HA5S1_REF



Destination Rectangle

HA2D1_REF



Destination Hexagon

HA3D1_REF



Destination Ellipse

HASD1_REF

Wire Arrows - Reference Only

Symbol	Description
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Generic Arrow - Left

HA1X1



Generic Arrow - Up

HA1X2



Generic Arrow - Right

HA1X3



Generic Arrow - Down

HA1X4



Arrow Tail - Left

HA1X1Y



Arrow Tail - Up

HA1X2Y



Arrow Tail - Right

HA1X3Y



Arrow Tail - Down

HA1X4Y

One-Line Components

Connector

Horizontal Symbol	Vertical Symbol	Description
		Jack/Plug
HC01PJ_1-	VC01PJ_1-	

Motor Control

Horizontal Symbol	Vertical Symbol	Description
		Circuit breaker
HCB11_1-	VCB11_1-	
		Motor circuit protector
HCB11M_1-	VCB11M_1-	
		Thermal circuit breaker
HCB11TH_1-	VCB11TH_1-	
		Disconnect
HDS11_1-	VDS11_1-	
		Fused disconnect
HDS11F_1-	VDS11F_1-	



HFU1_1-

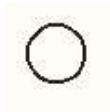


VFU1_1-

Fuse



HMO13_1-

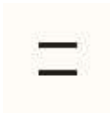


VMO13_1-

Motor

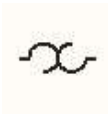


HMS11_1-



VMS11_1-

Motor starter



HOL1_1-



VOL1_1-

Overload



HCA113_1-



VCA113_1-

Capacitor

Transformer

Horizontal Symbol	Vertical Symbol	Description
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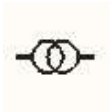


HXF1_1-

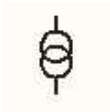


VXF1_1-

Transformer 1



HXF2_1-



VXF2_1-

Transformer 2

Terminal

Horizontal Symbol

Vertical Symbol

Description



HT0001_1-



VT0001_1-

Square terminal



HT0002_1-



VT0002_1-

Round terminal

Cable Marker

Horizontal Symbol

Vertical Symbol

Description



HW01_1-



VW01_1-

Cable marker

Bus-tap

Horizontal Symbol	Vertical Symbol	Description
		Bus-tap - main/dot
		Bus-tap - dual/tee
		Bus-tap - dual/corner

Miscellaneous

Horizontal Symbol	Vertical Symbol	Description
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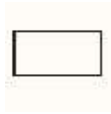


HC01WR_1-

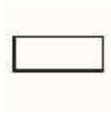


VC01WR_1-

Power receptacle



HDV1_1-



VDV1_1-

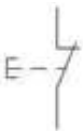
Generic load

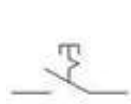
IEC Symbols

7

Push Buttons

Push Buttons

Horizontal Symbol	Vertical Symbol	Description
		Push Button Normally Open
HPB11	VPB11	
		Push Button Normally Closed
HPB12	VPB12	



HPB11L



VPB11L

Push Button Normally Open Latching



HPB12L

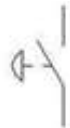


VPB12L

Push Button Normally Closed Latching



HPB11M



VPB11M

Mushroom Head Normally Open



HPB12M



VPB12M

Mushroom Head Normally Closed



HPB11ML



VPB11ML

Mushroom Head Normally Open Latching



HPB12ML



VPB12ML

Mushroom Head Normally Closed Latching



HPB11MTL



VPB11MTL

Mushroom Head Normally Open Twist Latch



HPB12MTL



VPB12MTL

Mushroom Head Normally Closed Twist Latch



HPB11S80

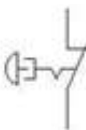


VPB11S80

Mushroom Head Normally Open Latching, Pull to Disengage



HPB12S80



VPB12S80

Mushroom Head Normally Closed Latching, Pull to Disengage



HPB11S82



VPB11S82

Mushroom Head Normally Open Latching, Key Operated



HPB12S82



VPB12S82

Mushroom Head Normally Closed Latching, Key Operated



HPB11RE



VPB11RE

Normally Open Push Button Recessed



HPB12RE



VPB12RE

Normally Closed Push Button Recessed



HPB11REL



VPB11REL

Normally Open Push Button Recessed Latched



HPB12REL



VPB12REL

Normally Closed Push Button Recessed Latched



HPB11PM



VPB11PM

Normally Open Push Button Positive Make



HPB12PB



VPB12PB

Normally Closed Push Button Positive Break



HPB21



VPB21

2nd+ Normally Open Contact



HPB22



VPB22

2nd+ Normally Closed Contact

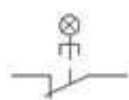


HPB11S75

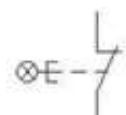


VPB11S75

Illuminated Push Button Normally Open



HPB12S75



VPB12S75

Illuminated Push Button Normally Closed

Illuminated Push Buttons

Horizontal Symbol	Vertical Symbol	Description
		Non-Auto Return Illuminated Push Button Normally Open
HPB11S76	VPB11S76	
		Non-Auto return Illuminated Push Button Normally Closed
HPB12S76	VPB12S76	

Selector Switches

Selector Switches

Horizontal Symbol	Vertical Symbol	Description
 HSS112	 VSS112	2 Position Maintain, Normally Open
 HSS122	 VSS122	2 Position Maintain, Normally Closed
 HSS112L	 VSS112L	2 Position Normally Open Return From Left
 HSS122L	 VSS122L	2 Position Normally Closed Return From Left



HSS112R



VSS112R

2 Position Normally Open Return From Right



HSS122R



VSS122R

2 Position Normally Closed Return From Right

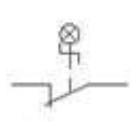


HSW11S77



VSW11S77

2 Position Normally Open with Lamp

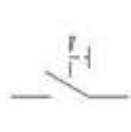


HSW12S77



VSW12S77

2 Position Normally Closed with Lamp



HSS2121F



VSS2121F

Normally Open Contact with Manual Unlatching



HSS2122F



VSS2122F

Normally Open Contact with Maintained Position



HSS217F



VSS217F

Normally Open Anticipated Contact

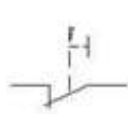


HSS218F



VSS218F

Normally Open Delayed Contact



HSS2221F



VSS2221F

Normally Closed Contact with Manual Unlatching

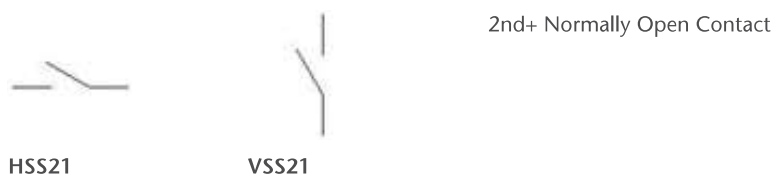
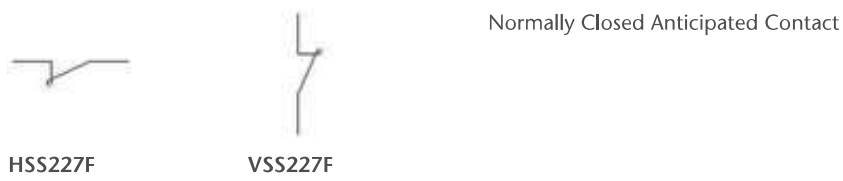


HSS2222F



VSS2222F

Normally Closed Contact with Maintained Position





HSS22



VSS22

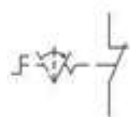
2nd+ Normally Closed Contact

3 Position Selector Switches

Horizontal Symbol	Vertical Symbol	Description
		3 Position Maintain, Normally Open
		3 Position Maintain, Normally Closed
		3 Position Normally Open Return From Left



HSS123L



VSS123L

3 Position Normally Closed Return From Left



HSS113R

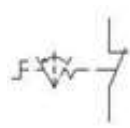


VSS113R

3 Position Normally Open Return From Right



HSS123R



VSS123R

3 Position Normally Closed Return From Right



HSS113B



VSS113B

3 Position Normally Open Return From Both



HSS123B



VSS123B

3 Position Normally Closed Return From Both



HSS11S31



VSS11S31

3 Position Normally Open Neutral 0



HSS12S31



VSS12S31

3 Position Normally Closed Neutral 0



HSS11S32



HSS11S32

3 Position Normally Open Neutral 1



HSS12S32



HSS12S32

3 Position Normally Closed Neutral 1



HSS11S33



HSS11S33

3 Position Normally Open Neutral 2



HSS12S33



HSS12S33

3 Position Normally Closed Neutral 2



HSS11S40



HSS11S40

3 Position Normally Open Key Operated Neutral 0



HSS12S40



HSS12S40

3 Position Normally Closed Key Operated Neutral 0



HSS11S41



HSS11S41

3 Position Normally Open Key Operated Neutral 1



HSS12S41



HSS12S41

3 Position Normally Closed Key Operated Neutral 1



HSS11S42



HSS11S42

3 Position Normally Open Key Operated Neutral 2



HSS12S42



HSS12S42

3 Position Normally Closed Key Operated Neutral 2



HSS11S43



HSS11S43

3 Stable Position Normally Open Key Operated
Neutral 0



HSS12S43



HSS12S43

3 Stable Position Normally Closed Key Operated
Neutral 0



HSS11S44



HSS11S44

3 Stable Position Normally Open Key Operated
Neutral 1

		3 Stable Position Normally Closed Key Operated Neutral 1
HSS12S44	HSS12S44	

		3 Stable Position Normally Open Key Operated Neutral 2
HSS11S45	HSS11S45	

		3 Stable Position Normally Closed Key Operated Neutral 2
HSS12S45	HSS12S45	

4 Position Selector Switches

Horizontal Symbol	Vertical Symbol	Description
		4 Position Maintain, Normally Open
HSS114	VSS114	



HSS124



VSS124

4 Position Maintain, Normally Closed



HSS11S46



VSS11S46

4 Position Key Selector Normally Open



HSS12S46



VSS12S46

4 Position Key Selector Normally Closed



HSS11S49



VSS11S49

4 Stable Positions Key Selector Normally Open



HSS12S49



VSS12S49

4 Stable Positions Key Selector Normally Closed



HSS11S50



VSS11S50

4 Stable Positions Key Selector Normally Open-Rotating in 2 Ways



HSS12S50



VSS12S50

4 Stable Positions Key Selector Normally Closed-Rotating in 2 Ways



HSS11S51



VSS11S51

4 Stable Positions Key Selector Normally Open-Rotating CW



HSS12S51



VSS12S51

4 Stable Positions Key Selector Normally Closed-Rotating CW

Breakers, Disconnects

1 Pole Circuit Breakers

Horizontal Symbol	Vertical Symbol	Description
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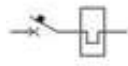


HCB1



VCB1

Circuit Breaker 1 Pole

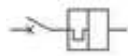


HCB11TH



VCB11TH

Thermal Circuit Breaker

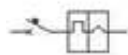


HCB11THI



VCB11THI

Current Limit/Thermal



HCB11Q9



VCB11Q9

Magneto/Thermal

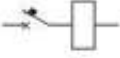
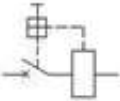
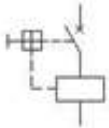
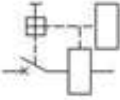
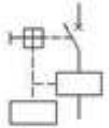
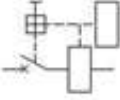
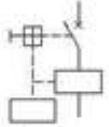
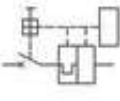
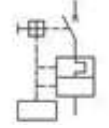


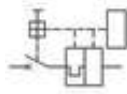
HCB11Q13



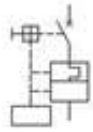
VCB11Q13

Magneto/Thermal with Differential

		Differential
HCB11Q17	VCB11Q17	
		With Current Protection
HCB11Q29	VCB11Q29	
		With Current Protection and Lack of Voltage Protection
HCB11Q33	VCB11Q33	
		With Max. Current and Min. Voltage Protection
HCB11Q37	VCB11Q37	
		With Max. Thermal/Current and Min. Voltage Protection
HCB11Q41	VCB11Q41	

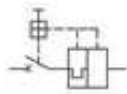


HCB11Q45

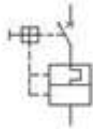


VCB11Q45

With Max. Thermal and Min. Voltage Protection

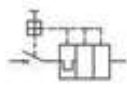


HCB11Q21

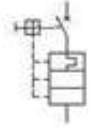


VCB11Q21

With Max. Thermal and Current Protection

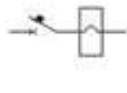


HCB11Q25

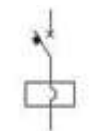


VCB11Q25

With Max. Thermal Protection and Differential

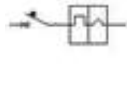


HCB11Q146

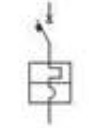


VCB11Q146

1 Pole Auto Switch with Magneto

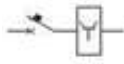
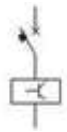


HCB11Q134

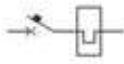


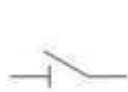
VCB11Q134

1 Pole Auto Magneto-Thermal Switch/Disconnect

		1 Pole Auto Disconnect Switch with Electronic Relay
HCB11Q138	VCB11Q138	

2nd+ Pole Circuit Breakers

Horizontal Symbol	Vertical Symbol	Description
		Circuit Breaker 2nd+ Pole
HCB2	VCB2	
		Thermal 2nd+ Pole
HCB21TH	VCB21TH	
		Current Limit/Thermal 2nd+ Pole
HCB21THI	VCB21THI	



HDS21



VDS21

Disconnect 2nd+ Pole

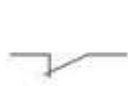


HDS21AUX



VDS21AUX

Disconnect Normally Open Auxiliary Contact



HDS22AUX



VDS22AUX

Disconnect Normally Closed Auxiliary Contact

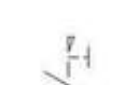


HCB2120F



VCB2120F

Auto Return



HCB2121F



VCB2121F

With Mechanical Block and Manual Unlatching

		With Maintained Position
HCB2122F	VCB2122F	
		Anticipated Contact
HCB217F	VCB217F	
		Delayed Contact
HCB218F	VCB218F	
		Circuit Breaker Normally Open Auxiliary Contact
HCB21	VCB21	
		Circuit Breaker Normally Closed Auxiliary Contact
HCB22	VCB22	



HCB2220F



VCB2220F

Auto Return



HCB2221F



VCB2221F

With Mechanical Block and Manual Unlatching



HCB2222F



VCB2222F

With Maintained Position



HCB2227F



VCB2227F

Anticipated Contact

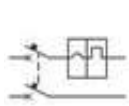


HCB2228F

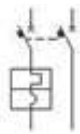


VCB2228F

Delayed Contact

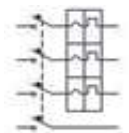


HCB1Q142

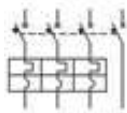


VCB1Q142

2 P Magneto-Thermal Switch, 1P Protected

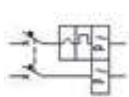


HCB1Q143

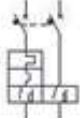


VCB1Q143

4 P Magneto-Thermal Switch, 3P Protected

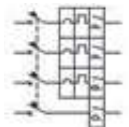


HCB1Q144

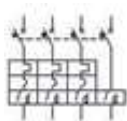


VCB1Q144

2 P Magneto-Thermal Switch with Differential, 1P Protected



HCB1Q145

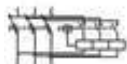


VCB1Q145

4 P Magneto-Thermal Switch with Differential, 3P Protected



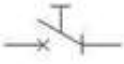
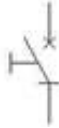
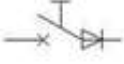
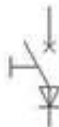
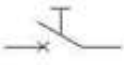
HDS1Q93



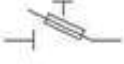
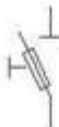
VDS1Q93

3 P 2 Way Disconnect Switch with Fuses

Power Switches

Horizontal Symbol	Vertical Symbol	Description
		1P with Semiconductors
HCB11Q53	VCB11Q53	
		1P with Semiconductors - unidirectional
HCB11Q57	VCB11Q57	
		2P Power Switch
HCB11Q50	VCB11Q50	

Fusible Disconnects

Horizontal Symbol	Vertical Symbol	Description
		Fused switch
HDS11F	VDS11F	

		2nd+ Pole Fused Switch
HDS21F	VDS21F	
		Auxiliary Contact, Normally Open
HDS21AUX	VDS21AUX	
		Auxiliary Contact, Normally Closed
HDS22AUX	VDS22AUX	
		1 Pole on load
HDS1OL	VDS1OL	
		2nd+ Pole on load
HDS2OL	VDS2OL	

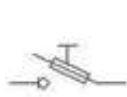


HDS11Q81



VDS11Q81

1 Phase Disconnect with Fuse



HDS11Q85



VDS11Q85

1 Phase maneuver Switch/Disconnect with Fuse

Disconnect 1 Pole

Horizontal Symbol	Vertical Symbol	Description
		Disconnect 1 Pole
		Disconnect 1 Pole Non-Fused
HDS11	VDS11	



HDS11Q119

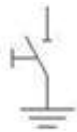


VDS11Q119

Maneuver Switch with Fuse



HDS11Q123



VDS11Q123

PE Earthing Switch



HDS11Q5



VDS11Q5

Power Auto Switch/Disconnect



HDS11Q69



VDS11Q69

Maneuver Switch/Disconnect



HDS11Q73



VDS11Q73

Disconnect with Lock Device



HDS11Q77



VDS11Q77

Switch/Disconnect with Lock Device



HDS11Q89



VDS11Q89

Two Way Disconnect with 3 Positions

Fuses, Transformers, Reactors

Reactors

Horizontal Symbol

Vertical Symbol

Description



HRT1



VRT1

Reactors - General



HRT1IC



VRT1IC

Reactors - Iron cored

		Inductor With Magnetic Core Air Gap
HRT1L3	VRT1L3	
		Inductor With Magnetic Core Continuously Variable
HRT1L4	VRT1L4	

Fuses

Horizontal Symbol	Vertical Symbol	Description
		Fuse
HFU1	VFU1	
		Fuse Auxiliary Contact, Normally Open
HFU21	VFU21	



HFU22

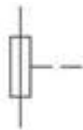


VFU22

Fuse Auxiliary Contact, Normally Closed



HFU1ST



VFU1ST

Stiker



HFU1AC



VFU1AC

With alarm contact



HFU1LS



VFU1LS

With separate alarm contact



HFU2LS



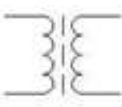
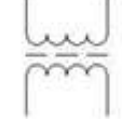
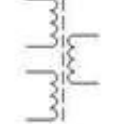
VFU2LS

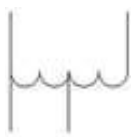
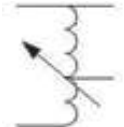
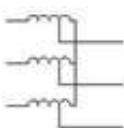
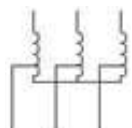
1 Pole - Live Side

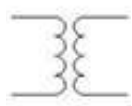
Fuse Switches

Horizontal Symbol	Vertical Symbol	Description
		1 Pole
HFU1FS	VFU1FS	
		1 Pole Child
HFU2FS	VFU2FS	

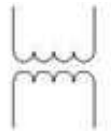
Transformers

Horizontal Symbol	Vertical Symbol	Description
		Transformer
HXF1	VXF1	
		Transformer Dual
HXF1D	VXF1D	

		Transformer Dual (flipped)
HXF1DR	VXF1DR	
		Potential Transformer
HXF1PT	VXF1PT	
		Single phase auto
HXF1PIAUTO	VXF1PIAUTO	
		1 Phase Autotransformer
HXF1T18	VXF1T18	
		3 Phase Autotransformer Star Connected
HXF1T19	VXF1T19	

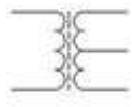


HXF1T2

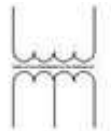


VXF1T2

Power Transformer 1 with 2 Windings

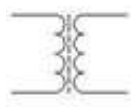


HXF1T4

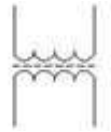


VXF1T4

Power Transformer 2 with 2 Windings



HXF1T3



VXF1T3

Power Transformer with 2 Windings and Screen

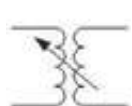


HXF1T6



VXF1T6

Power Transformer with 3 Windings



HXF1T5



VXF1T5

Adjustable Power Transformer with 2 Windings



HXF1T34



VXF1T34

Voltage Transformer

Current Transformers

Horizontal Symbol

Vertical Symbol

Description



HXF1CT



VXF1CT

CT Current Transformer



HXF1CTR



VXF1CTR

CT (Flipped)



HXF1T1



VXF1T1

Current Transformer 2

		With 2 Secondaries - Independent Magnetic Circuits
HXF1T30	VXF1T30	

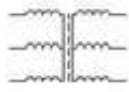
		With 2 Secondaries - Common Magnetic Circuit
HXF1T31	VXF1T31	

		With Tapped Secondary Winding
HXF1T32	VXF1T32	

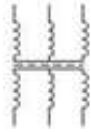
		With Conductor Indication
HXF1T33	VXF1T33	

3 Phase Transformers

Horizontal Symbol	Vertical Symbol	Description
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HXF1P3



VXF1P3

3 Phase



HXF1P3SD

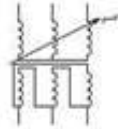


VXF1P3SD

3 Phase Star/Delta



HXF1T11



VXF1T11

3 Phase Star/Delta Primary with Sockets



HXF1T12



VXF1T12

3 Phase Star/Zigzag



HXF1T13



VXF1T13

3 Phase Delta/Delta

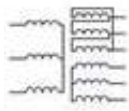


HXF1T14

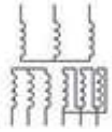


VXF1T14

3 Phase Delta/Star

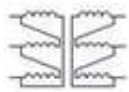


HXF1T15



VXF1T15

3 Phase Star/Star/Delta with 3 Windings

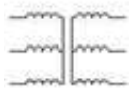


HXF1T20



VXF1T20

3 Phase Delta/Delta

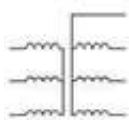


HXF1T7

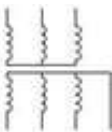


VXF1T7

3 Phase Star/Star

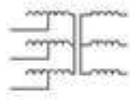


HXF1T8

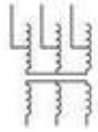


VXF1T8

3 Phase Star/Star Secondary with Neutral



HXF1T9



VXF1T9

3 Phase Star/Star Primary with Plugs

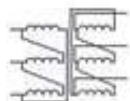


HXF1T21



VXF1T21

3 Phase Dy5



HXF1T22

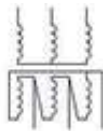


VXF1T22

3 Phase Dd6

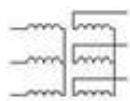


HXF1T23

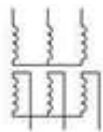


VXF1T23

3 Phase Yd5



HXF1T24

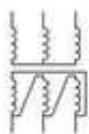


VXF1T24

3 Phase Yy6



HXF1T25



VXF1T25

3 Phase Yd11



HXF1T26



VXF1T26

3 Phase Dy11



HXF1T27



VXF1T27

3 Phase Dz0



HXF1T28



VXF1T28

3 Phase Yz5



HXF1T29



VXF1T29

3 Phase Dz6



HXF1T30



VXF1T30

3 Phase Yz11

Relays, Contacts

Relays and Contacts

Horizontal Symbol	Vertical Symbol	Description
		Relay Normally Open Contact
HCR21	VCR21	
		Relay Normally Closed Contact
HCR22	VCR22	
		Relay Form C
HCR23R	VCR23R	

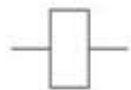


HCR23

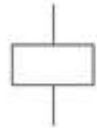


VCR23

Relay Form C Flipped

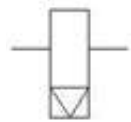


HCR1

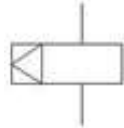


VCR1

Relay Coil

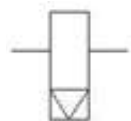


HLR1

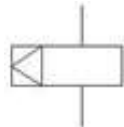


VLR1

Latch Relay Coil

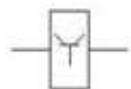


HLR2

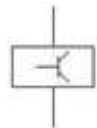


VLR2

Latch relay (child coil)

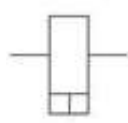


HCR1SSD

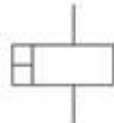


VCR1SSD

Solid State



HCR1HSP



VCR1HSP

High Speed

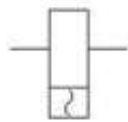


HCR1ACU

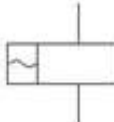


VCR1ACU

AC Unaffected

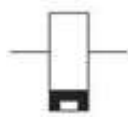


HCR1AC

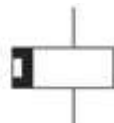


VCR1AC

AC



HCR1POL



VCR1POL

Polarized



HCR1MSR



VCR1MSR

Measuring



HCR2121F



VCR2121F

With Mechanical Block and Manual Unlatching



HCR2122F



VCR2122F

With Maintained Position



HCR217F



VCR217F

Anticipated Contact



HCR218F



VCR218F

Delayed Contact

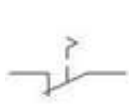


HCR2221F

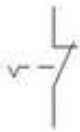


VCR2221F

With Mechanical Block and Manual Unlatching



HCR2222F



VCR2222F

With Maintained Position



HCR227F



VCR227F

Anticipated Contact

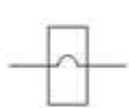


HCR228F

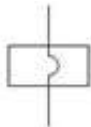


VCR228F

Delayed Contact



HCR1F34

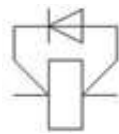


VCR1F34

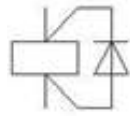
Magnetic Protection

Relays with Surpression

Horizontal Symbol	Vertical Symbol	Description
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HCR1K33



VCR1K33

Relay with Integrated Block Diode

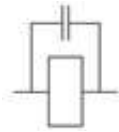


HCR1K35

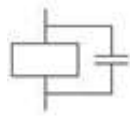


VCR1K35

Relay with Integrated Block Diode and Integrated LED

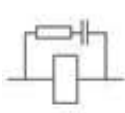


HCR1K37

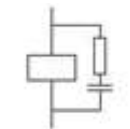


VCR1K37

Relay with Capacitor



HCR1K39

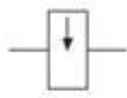


VCR1K39

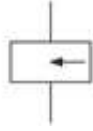
Relay with RC Circuit

Current Protection Relays

Horizontal Symbol	Vertical Symbol	Description
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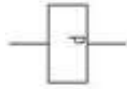


HCR1F28

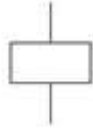


VCR1F28

Come Back Current Protection

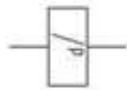


HCR1F29

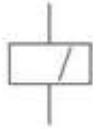


VCR1F29

Differential Current Protection

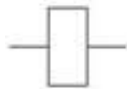


HCR1F30

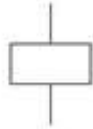


VCR1F30

Differential Current Protection - Relative Value

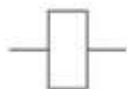


HCR1F25

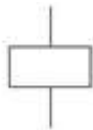


VCR1F25

Maximum Current Protection

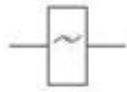


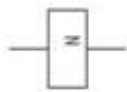
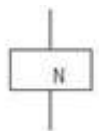
HCR1F26

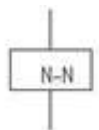


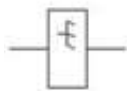
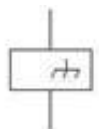
VCR1F26

Minimum Current Protection

		Minimum and Maximum Current Protection
HCR1F27	VCR1F27	

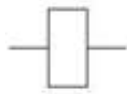
		In Neutral
HCR1F32	VCR1F32	

		In Neutral between 2 Multi-Phase Systems
HCR1F33	VCR1F33	

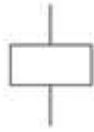
		Ground Failure Current Protection
HCR1F37	VCR1F37	

Voltage Protection Relays

Horizontal Symbol	Vertical Symbol	Description
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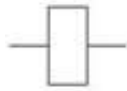


HCR1F35

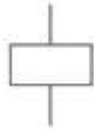


VCR1F35

Minimum Voltage Protection

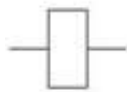


HCR1F36

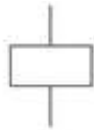


VCR1F36

Maximum Voltage Protection

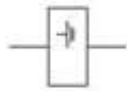


HCR1F38



VCR1F38

Residual Voltage Protection

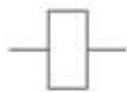


HCR1F31

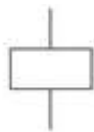


VCR1F31

Ground Failure Voltage Protection



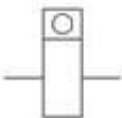
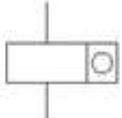
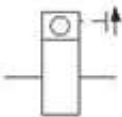
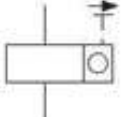
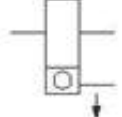
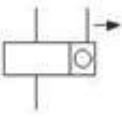
HCR1F39



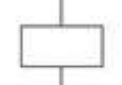
VCR1F39

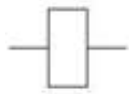
Lack of Voltage Protection

Counter Relays

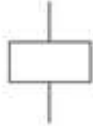
Horizontal Symbol	Vertical Symbol	Description
 HCR1CNN	 VCR1CNN	Counter No Reset
 HCR1CNM	 VCR1CNM	Counter Manual Reset
 HCR1CNE	 VCR1CNE	Counter Electronic Reset

Miscellaneous Relays

Horizontal Symbol	Vertical Symbol	Description
 HCR1F40	 VCR1F40	Frequency Relay

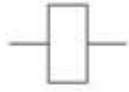


HCR1F41

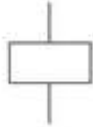


VCR1F41

Minimum Impedance Relay

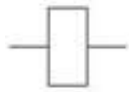


HCR1F42

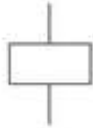


VCR1F42

Relay Sensing Lack of Phase in Three Phase System

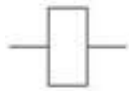


HCR1F43

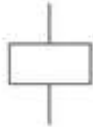


VCR1F43

Minimum Active Power Relay

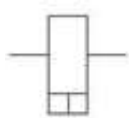


HCR1F44

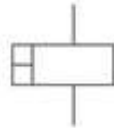


VCR1F44

Insulating Relay

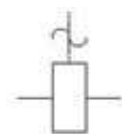


HCR1K1

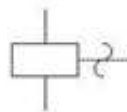


VCR1K1

Quick Relay Coil



HCR1K11

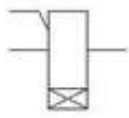


VCR1K11

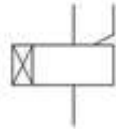
Mechanical Resonance Relay

Time Delay Relays

Horizontal Symbol	Vertical Symbol	Description
		ON Delay Coil
		OFF Delay Coil
		ON/OFF Delay



HTD1K25

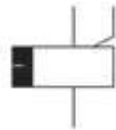


VTD1K25

3 Clamp Delay Relay - Energized



HTD1K27

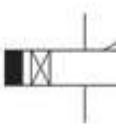


VTD1K27

3 Clamp Delay Relay - De-energized

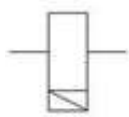


HTD1K29

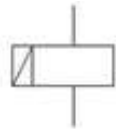


VTD1K29

3 Clamp Delay Relay - Energized/De-energized



HTD1K5



VTD1K5

Latency Relay



HTD21N



VTD21N

ON Delay Normally Open(Delay Close)

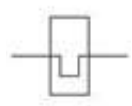
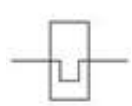
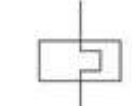
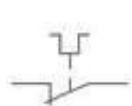
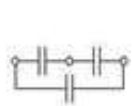
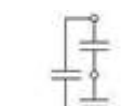
		ON Delay Normally Closed(Delay Open)
HTD22N	VTD22N	
		OFF Delay Normally Open (Instant Close/Delay Open)
HTD21F	VTD21F	
		OFF Delay Normally Closed (Instant Open/Delay Close)
HTD22F	VTD22F	
		Normally Open Contact (Instant)
HTD21I	VTD21I	
		Normally Closed Contact (Instant)
HTD22I	VTD22I	

		Normally Open Contact (Instant-for Delay Close)
HTD21IF	VTD21IF	
		Normally Closed Contact (Instant-for Delay Close)
HTD22IF	VTD22IF	
		Normally Open Delay ON/OFF
HTD21DOO	VTD21DOO	
		Normally Closed Delay ON/OFF
HTD22DOO	VTD22DOO	

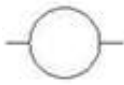
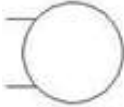
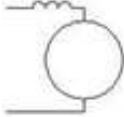
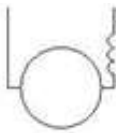
Motor Control

Motor Control

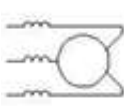
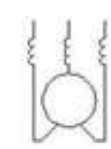
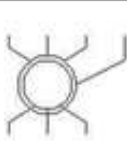
Horizontal Symbol	Vertical Symbol	Description
-------------------	-----------------	-------------

		Overload, 1 Pole
HOL1	VOL1	
		2nd+ Overload Pole
HOL2	VOL2	
		2nd+ Overload, Normally Open Contact
HOL21	VOL21	
		2nd+ Overload, Normally Closed Contact
HOL22	VOL22	
		3 Phase KVAR Capacitor
HCA113	VCA113	
NOTE Multi-pole devices are constructed using parent and child symbols to adhere to the underlying ladder spacing.		

1 Phase Motors

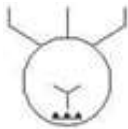
Horizontal Symbol	Vertical Symbol	Description
		1 Phase Motor
HMO12	VMO12	
		1 Phase Motor with Fan
HMO1M3M	VMO1M3M	
		1 Phase AC Motor
HMO1M9	VMO1M9	
		1 Phase AC Motor in Series Connection
HMO1M10	VMO1M10	
		1 Phase Synchronous AC Motor
HMO1M16	VMO1M16	

3 Phase Motors

Horizontal Symbol	Vertical Symbol	Description
		3 Phase Motor
HMO13	VMO13	
		3 Phase Motor (4 Connections)
HMO14	VMO14	
		3 Phase Motor with Fan
HMO1M2	VMO1M2	
		3 Phase Asynchro Motor with Series Excitation
HMO1M3	VMO1M3	
		3 Phase Asynchro Wound-Rotor Motor
HMO1M4	VMO1M4	



HMO1M5

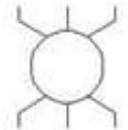


VMO1M5

3 Phase Asynchro Star Connected Stator Auto Starter
on Rotor



HMO1M11



VMO1M11

3 Phase Asynchro Motor - 6 Pole



HMO1M17



VMO1M17

3 Phase Synchronous AC Motor

DC Motors

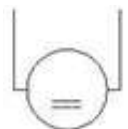
Horizontal Symbol

Vertical Symbol

Description



HMO1M6



VMO1M6

DC Motor



HMO1M13



VMO1M13

DC Motor with Permanent Magnets



HMO1M14



VMO1M14

DC Motor - Linear with Permanent Magnets



HMO1M15



VMO1M15

DC Motor - Stepping with Permanent Magnets

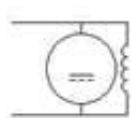


HMO1M7



VMO1M7

DC Motor - Series Excitation

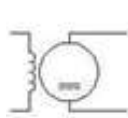


HMO1M8



VMO1M8

DC Motor - Derived Excitation



HMO1M12



VMO1M12

DC Motor - Independent Excitation

Generators

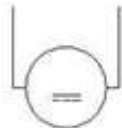
Horizontal Symbol

Vertical Symbol

Description

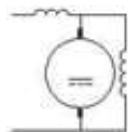


HPW1G9

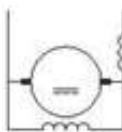


VPW1G9

DC Generator



HPW1G10



VPW1G10

DC Generator with Compound Excitation

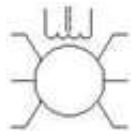


HPW1G6

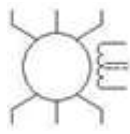


VPW1G6

3 Phase Synchro Generator with Permanent Magnets



HPW1G7



VPW1G7

3 Phase Synchro Generator 1



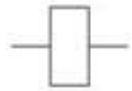
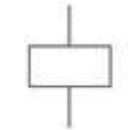
HPW1G8



VPW1G8

3 Phase Synchro Generator 2

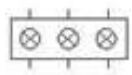
Motor Starters

Horizontal Symbol	Vertical Symbol	Description
		Motor Starter Coil
		Motor Starter 1 Pole Normally Open (Power)

		Motor Starter 1 Pole Normally Closed (Power)
HMS22P	VMS22P	
		2nd+ Motor Starter Normally Open
HMS21	VMS21	
		2nd+ Motor Starter Normally Closed
HMS22	VMS22	
NOTE Multi-pole devices are constructed using parent and child symbols to adhere to the underlying ladder spacing.		

Pilot Lights

Pilot Lights

Horizontal Symbol	Vertical Symbol	Description
		Blinking Device
HLT1H21	VLT1H21	

		Neon Lamp
HLT1H22	VLT1H22	

		Incandescent Lamp
HLT1H24	VLT1H24	

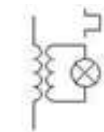
Standard Lights

Horizontal Symbol	Vertical Symbol	Description
		Red Standard
HLT1R	VLT1R	
		Green Standard
HLT1G	VLT1G	



NOTE Lights receive text to indicate the color at the time of insertion.

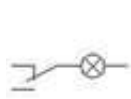
Transformer Lights

Horizontal Symbol	Vertical Symbol	Description
		Blinking Light - Bulb with Transformer
HLT1H10	VLT1H10	
		Indicator Lamp Energized by Built-in Transformer
HLT1H23A	VLT1H23A	
		Red
HLT1RT	VLT1RT	
		Green
HLT1GT	VLT1GT	
		Orange
HLT1AT	VLT1AT	

		Yellow
HLT1YT	VLT1YT	
		Blue
HLT1BT	VLT1BT	
		White
HLT1WT	VLT1WT	
		Clear
HLT1CT	VLT1CT	
NOTE Lights receive text to indicate the color at the time of insertion.		

Push to Test Lights

Horizontal Symbol	Vertical Symbol	Description
-------------------	-----------------	-------------



HLT1RP



VLT1RP

Red Press To Test



HLT1GP



VLT1GP

Green Press To Test



HLT1AP



VLT1AP

Orange Press To Test



HLT1YP



VLT1YP

Yellow Press To Test



HLT1BP



VLT1BP

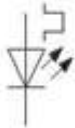
Blue Press To Test

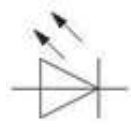
		White Press To Test
HLT1WP	VLT1WP	

		Clear Press To Test
HLT1CP	VLT1CP	

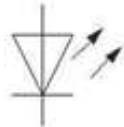
NOTE Lights receive text to indicate the color at the time of insertion.

LEDs

Horizontal Symbol	Vertical Symbol	Description
		Blinking LED
HLT1H13	VLT1H13	
		LED Indicator Lamp
HLT1H25	VLT1H25	



HLT1RL



VLT1RL

Red

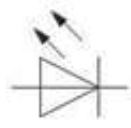


HLT1RLR



VLT1RLR

Red 180



HLT1GL



VLT1GL

Green

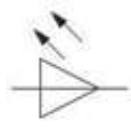


HLT1GLR



VLT1GLR

Green 180



HLT1AL



VLT1AL

Orange



HLT1ALR

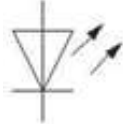


VLT1ALR

Orange 180



HLT1YL



VLT1YL

Yellow



HLT1YLR

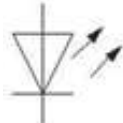


VLT1YLR

Yellow 180



HLT1BL



VLT1BL

Blue

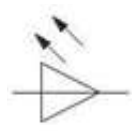


HLT1BLR

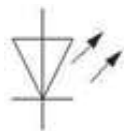


VLT1BLR

Blue 180



HLT1WL



VLT1WL

White

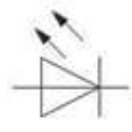


HLT1WLR



VLT1WLR

White 180



HLT1CL



VLT1CL

Clear



HLT1CLR



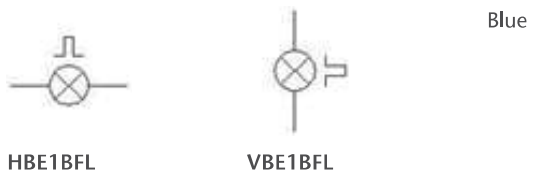
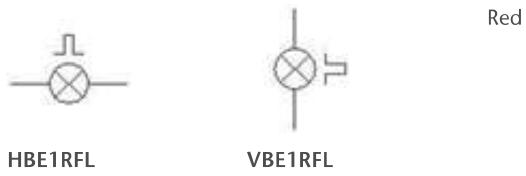
VLT1CLR

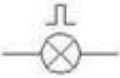
Clear 180

NOTE Lights receive text to indicate the color at the time of insertion.

Beacons - Flashing

Horizontal Symbol	Vertical Symbol	Description
-------------------	-----------------	-------------

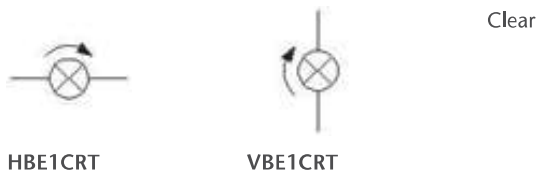
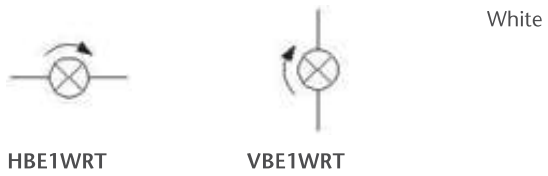
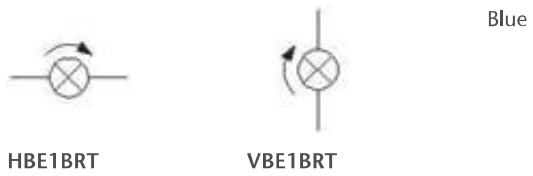
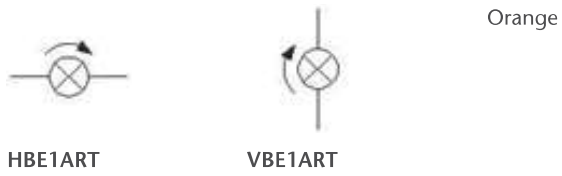


		White
HBE1WFL	VBE1WFL	
		Clear
HBE1CFL	VBE1CFL	

NOTE Lights receive text to indicate the color at the time of insertion.

Beacons - Rotating

Horizontal Symbol	Vertical Symbol	Description
		Red
HBE1RRT	VBE1RRT	
		Green
HBE1GRT	VBE1GRT	



NOTE Lights receive text to indicate the color at the time of insertion.

PLC I/O

Horizontal Symbol	Vertical Symbol	Description
		IN, 1st Point, 1 Wire
PLCIO1T	PLCIO1TV	
		IN, 1st Point, 2 Wires
PLCIO2T	PLCIO2TV	
		OUT, 1st Point, 1 Wire
PLCIO1T	PLCIO1TV	
		OUT, 1st Point, 2 Wires
PLCIO2T	PLCIO2TV	
		IN, 2nd+ Child, 1 Wire
PLCIO1	PLCIO1V	

		IN, 2nd+ Child, 2 Wires
PLCIOI2	PLCIOI2V	
		OUT, 2nd+ Child, 1 Wire
PLCIOO1	PLCIOO1V	
		OUT, 2nd+ Child, 2 Wires
PLCIOO2	PLCIOO2V	

Terminals, Connectors

Terminals

Horizontal Symbol	Vertical Symbol	Description
		Square
HT0_01	VT0_01	



HT0W01



VT0W01

Square with Wire Number



HT0001



VT0001

Square with Terminal Number



HT1001

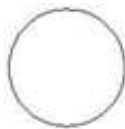


VT1001

Square with Wire Number Change



HT0_02



VT0_02

Round



HT0W02

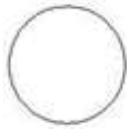


VT0W02

Round with Wire Number

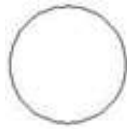


HT0002

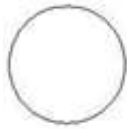


VT0002

Round with Terminal Number



HT1002



VT1002

Round with Wire Number Change



HT0_03



VT0_03

Hexagon



HT0W03



VT0W03

Hexagon with Wire Number



HT0003



VT0003

Hexagon with Terminal Number



HT1003



VT1003

Hexagon with Wire Number Change



HT0_04



VT0_04

Diamond



HT0W04



VT0W04

Diamond with Wire Number



HT0004



VT0004

Diamond with Terminal Number

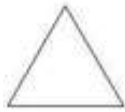


HT1004

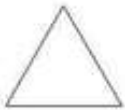


VT1004

Diamond with Wire Number Change

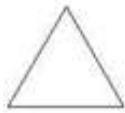


HT0_05

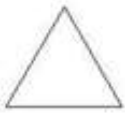


VT0_05

Triangle

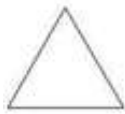


HT0W05

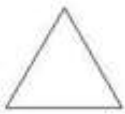


VT0W05

Triangle with Wire Number

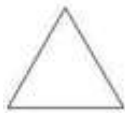


HT0005

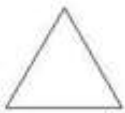


VT0005

Triangle with Terminal Number



HT1005



VT1005

Triangle with Wire Number Change

In-Line Wire Labels

Horizontal Symbol	Vertical Symbol	Description
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In-Line Wire Label	
HT0_LGEN- ERIC	VT0_LGEN- ERIC
Wire Number Copy	
HT0_WGEN- ERIC	VT0_WGEN- ERIC

Power Distribution Blocks

Horizontal Symbol	Vertical Symbol	Description
 HDB1308	 VDB1308	3 Terminal, 10 Unit Spacing
 HDB1312	 VDB1312	3 Terminal, 15 Unit Spacing

		3 Terminal, 20 Unit Spacing
HDB1316	VDB1316	

Connectors - No Wirenumber Changes

Horizontal Symbol	Vertical Symbol	Description
		Plug/Jack
HC01PJ	VC01PJ	
		Plug/Jack (common pin number)
HC01PJ1	VC01PJ1	
		Plug Up or Left
HC01P_	VC01P_	

		Jack Down or Right
HC01_J	VC01_J	
		2nd+ Plug/Jack
HC02PJ	VC02PJ	
		2nd+ Plug/Jack (common pin number)
HC02PJ1	VC02PJ1	
		2nd+ Plug Up or Left
HC02P_	VC02P_	
		2nd+ Jack Down or Right
HC02_J	VC02_J	



HC01JP



VC01JP

Jack/Plug



HC01JP1



VC01JP1

Jack/Plug (common pin number)



HC01_P



VC01_P

Plug Down or Right



HC01J_



VC01J_

Jack Up or Left

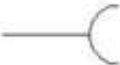


HC02JP



VC02JP

2nd+ Jack/Plug

		2nd+ Jack/Plug (common pin number)
HC02JP1	VC02JP1	
		2nd+ Plug Down or Right
HC02_P	VC02_P	
		2nd+ Jack Up or Left
HC02J_	VC02J_	
		Plug/Jack
HCN1PJ	VCN1PJ	
		Plug/Jack (common pin number)
HCN1PJ1	VCN1PJ1	



HC01P_



VC01P_

Plug Up or Left



HC01_J



VC01_J

Jack Down or Right



HCN2PJ



VCN2PJ

2nd+ Plug/Jack



HCN2PJ1



VCN2PJ1

2nd+ Plug/Jack (common pin number)



HC02P_



VC02P_

2nd+ Plug Up or Left

		2nd+ Jack Down or Right
HC02_J	VC02_J	

Connectors - Wirenumber Changes

Horizontal Symbol	Vertical Symbol	Description
		Plug/Jack
HCN1PJ	VCN1PJ	
		Plug/Jack (common pin number)
HCN1PJ1	VCN1PJ1	
		Plug Up or Left
HC01P_	VC01P_	



HC01_J



VC01_J

Jack Down or Right



HCN2PJ



VCN2PJ

2nd+ Plug/Jack



HCN2PJ1



VCN2PJ1

2nd+ Plug/Jack (common pin number)



HC02P_



VC02P_

2nd+ Plug Up or Left



HC02_J



VC02_J

2nd+ Jack Down or Right

		Jack/Plug
HCN1JP	VCN1JP	
		Jack/Plug (common pin number)
HCN1JP1	VCN1JP1	
		Plug Down or Right
HC01_P	VC01_P	
		Jack Up or Left
HC01J_	VC01J_	
		2nd+ Jack/Plug
HCN2JP	VCN2JP	

		2nd+ Jack/Plug (common pin number)
HCN2JP1	VCN2JP1	

		2nd+ Plug Down or Right
HC02_P	VC02_P	

		2nd+ Jack Up or Left
HC02_	VC02_	

Limit Switches

Horizontal Symbol	Vertical Symbol	Description
		Limit Switch Normally Open
HLS11	VLS11	

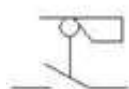


HLS12



VLS12

Limit Switch Normally Closed

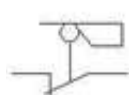


HLS11C

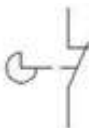


VLS11C

Limit Switch, Roller Normally Open



HLS12C



VLS12C

Limit Switch, Roller Normally Closed



HLS11S13



VLS11S13

Limit Switch Normally Open - Cam Driven

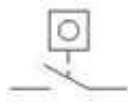


HLS12S13



VLS12S13

Limit Switch Normally Closed - Cam Driven

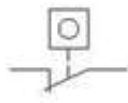


HLS11S16

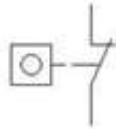


VLS11S16

Limit Switch Normally Open - Events Driven



HLS12S16



VLS12S16

Limit Switch Normally Closed - Events Driven

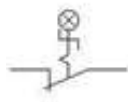


HLS11S78



VLS11S78

2 Position Switch Normally Open with Detents and Lamp



HLS12S78



VLS12S78

2 Position Switch Normally Closed with Detents and Lamp



HLS11S84

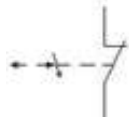


VLS11S84

Bi-directional Lever Actuated - Normally Open



HLS12S84

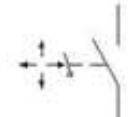


VLS12S84

Bi-directional Lever Actuated - Normally Closed

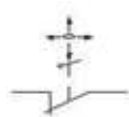


HLS11S85

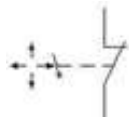


VLS11S85

Four-directional Lever Actuated - Normally Open



HLS12S85



VLS12S85

Four-directional Lever Actuated - Normally Closed



HLS11S87

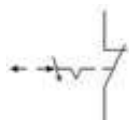


VLS11S87

Bi-directional Lever Actuated - Normally Open with Detent



HLS12S87

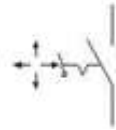


VLS12S87

Bi-directional Lever Actuated - Normally Closed with Detent



HLS11S88



VLS11S88

Four-directional Lever Actuated - Normally Open with Detent



HLS12S88



VLS12S88

Four-directional Lever Actuated - Normally Closed with Detent



HLS21



VLS21

2nd+ Normally Open Contact



HLS22



VLS22

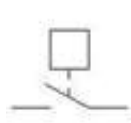
2nd+ Normally Closed Contact

Pressure and Temperature Switches

Horizontal Symbol

Vertical Symbol

Description

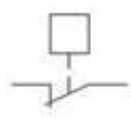


HPS11



VPS11

Pressure Switch, Normally Open

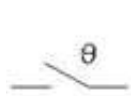


HPS12



VPS12

Pressure Switch, Normally Closed

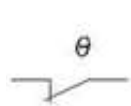


HTS11

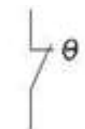


VTS11

Temperature Switch 1, Normally Open

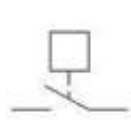


HTS12



VTS12

Temperature Switch 1, Normally Closed

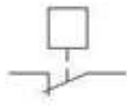


HTS11S18

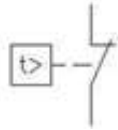


VTS11S18

Temperature Switch 2, Normally Open

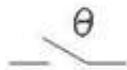


HTS12S18

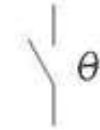


VTS12S18

Temperature Switch 2, Normally Closed

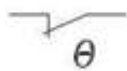


HTS11S74

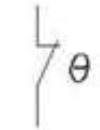


VTS11S74

Temperature Switch 3, Normally Open



HTS12S74



VTS12S74

Temperature Switch 3, Normally Closed



HSW21



VSW21

2nd+ Normally Open Contact



HSW22

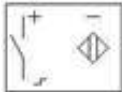


VSW22

2nd+ Normally Closed Contact

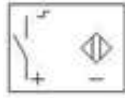
Proximity Switches

Inductive Switches

Horizontal Symbol	Vertical Symbol	Description
		Ferrous
HPX11	VPX11	
		Ferrous Proximity Switch, Normally Open
HPX11I	VPX11I	
		Ferrous Proximity Switch, Normally Closed
HPX12I	VPX12I	
		Normally Open 3 Wire
HPX11IN3	VPX11IN3	



HPX11IN3R

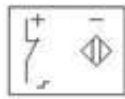


VPX11IN3R

Normally Open 3 Wire 180



HPX12IN3

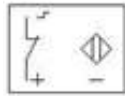


VPX12IN3

Normally Closed 3 Wire

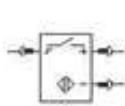


HPX12IN3R

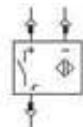


VPX12IN3R

Normally Closed 3 Wire 180

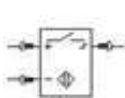


HPX11IN3C

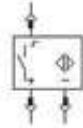


VPX11IN3C

Normally Open 3 Wire with connector

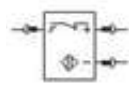
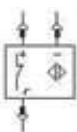


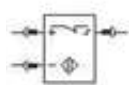
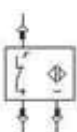
HPX11IN3RC



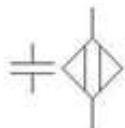
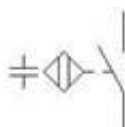
VPX11IN3RC

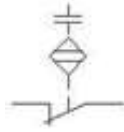
Normally Open 3 Wire 180 with connector

		Normally Closed 3 Wire with connector
HPX12IN3C	VPX12IN3C	

		Normally Closed 3 Wire 180 with connector
HPX12IN3RC	VPX12IN3RC	

Capacitive Switches

Horizontal Symbol	Vertical Symbol	Description
		Capacitive
HPX1C	VPX1C	
		Capacitive Switch, Normally Open
HPX11C	VPX11C	



HPX12C

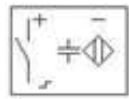


VPX12C

Capacitive Switch, Normally Closed



HPX11C3

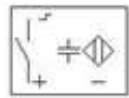


VPX11C3

Normally Open 3 Wire



HPX11C3R

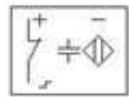


VPX11C3R

Normally Open 3 Wire 180



HPX12C3

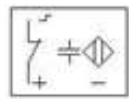


VPX12C3

Normally Closed 3 Wire

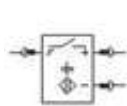


HPX12C3R

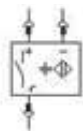


VPX12C3R

Normally Closed 3 Wire 180



HPX11C3C

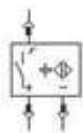


VPX11C3C

Normally Open 3 Wire with connector

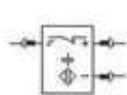


HPX11C3RC

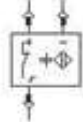


VPX11C3RC

Normally Open 3 Wire 180 with connector

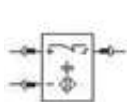


HPX12C3C

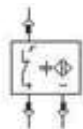


VPX12C3C

Normally Closed 3 Wire with connector



HPX12C3RC



VPX12C3RC

Normally Closed 3 Wire 180 with connector

Magnetic Switches

Horizontal Symbol	Vertical Symbol	Description
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HPX1M



VPX1M

Magnetic

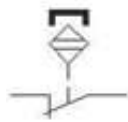


HPX11M



VPX11M

Magnetic Proximity Switch, Normally Open

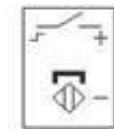


HPX12M

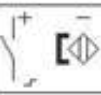


VPX12M

Magnetic Proximity Switch, Normally Closed

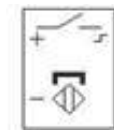


HPX11M3

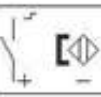


VPX11M3

Normally Open 3 Wire



HPX11M3R



VPX11M3R

Normally Open 3 Wire 180



HPX12M3

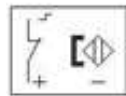


VPX12M3

Normally Closed 3 Wire

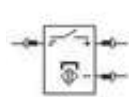


HPX12M3R

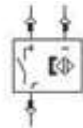


VPX12M3R

Normally Closed 3 Wire 180



HPX11M3C

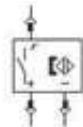


VPX11M3C

Normally Open 3 Wire with connector

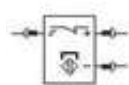


HPX11M3RC

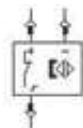


VPX11M3RC

Normally Open 3 Wire 180 with connector

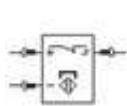


HPX12M3C

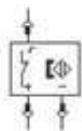


VPX12M3C

Normally Closed 3 Wire with connector



HPX12M3RC

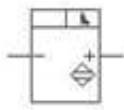


VPX12M3RC

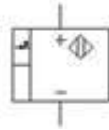
Normally Closed 3 Wire 180 with connector

Photoelectric Emitter Switches

Horizontal Symbol	Vertical Symbol	Description
A horizontal schematic symbol for an AC-driven emitter. It consists of a rectangle with a small circle containing a lightning bolt on the top edge, representing AC power input. Two horizontal lines extend from the left and right sides of the rectangle.	A vertical schematic symbol for an AC-driven emitter. It consists of a rectangle with a small circle containing a lightning bolt on the left edge, representing AC power input. Two vertical lines extend from the top and bottom of the rectangle.	Emitter - AC Driven
A horizontal schematic symbol for a DC-driven emitter. It consists of a rectangle with a small circle containing a plus sign on the top edge, representing DC power input. Two horizontal lines extend from the left and right sides of the rectangle.	A vertical schematic symbol for a DC-driven emitter. It consists of a rectangle with a small circle containing a plus sign on the left edge, representing DC power input. Two vertical lines extend from the top and bottom of the rectangle.	Emitter - DC Driven
A horizontal schematic symbol for an emitter-receiver pair with Form C output. It shows a rectangle with a complex internal circuit including a switch and a coil. On the left, there are three horizontal lines representing multiple inputs. On the right, there is one horizontal line representing the output.	A vertical schematic symbol for an emitter-receiver pair with Form C output. It shows a rectangle with a complex internal circuit including a switch and a coil. On the left, there are three vertical lines representing multiple inputs. On the right, there is one vertical line representing the output.	Emitter - Receiver with Form C



HPE1B20

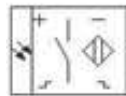


VPE1B20

Emitter - DC Driven



HPE11PE4

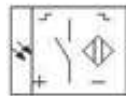


VPE11PE4

Normally Open 4 wire



HPE11PE4R



VPE11PE4R

Normally Open 4 wire 180



HPE12PE4

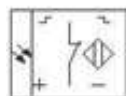


VPE12PE4

Normally Closed 4 wire

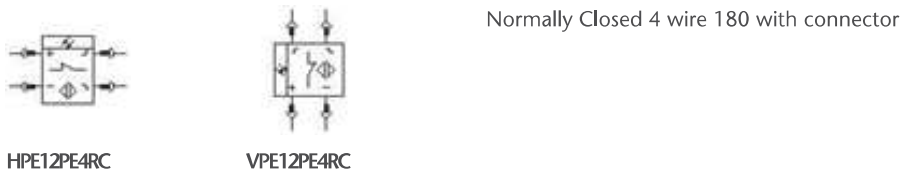
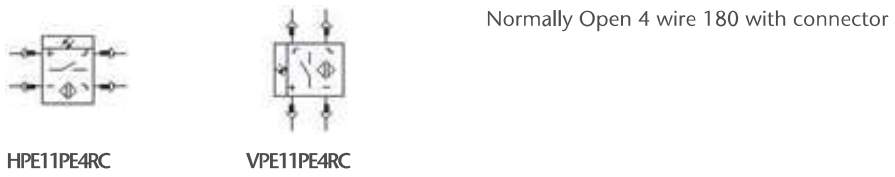


HPE12PE4R



VPE12PE4R

Normally Closed 4 wire 180

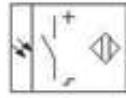


Photoelectric Receiver Switches

Horizontal Symbol	Vertical Symbol	Description
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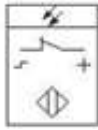


HPE11PE2

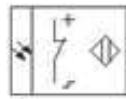


VPE11PE2

Normally Open Receiver 2 wire

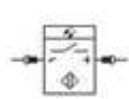


HPE12PE2

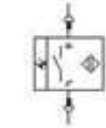


VPE12PE2

Normally Closed Receiver 2 wire

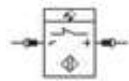


HPE11PE2C

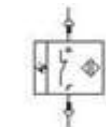


VPE11PE2C

Normally Open Receiver 2 wire with connector

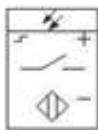


HPE12PE2C

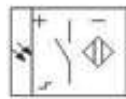


VPE12PE2C

Normally Closed Receiver 2 wire with connector



HPE11PE3

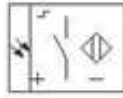


VPE11PE3

Normally Open Receiver 3 wire

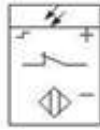


HPE11PE3R

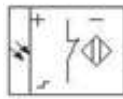


VPE11PE3R

Normally Open Receiver 3 wire 180



HPE12PE3

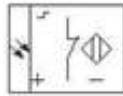


VPE12PE3

Normally Closed Receiver 3 wire

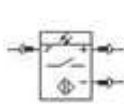


HPE12PE3R

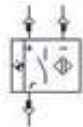


VPE12PE3R

Normally Closed Receiver 3 wire 180

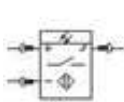


HPE11PE3C



VPE11PE3C

Normally Open Receiver 3 wire with connector

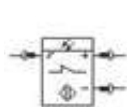


HPE11PE3RC

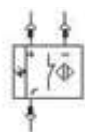


VPE11PE3RC

Normally Open Receiver 3 wire 180 with connector

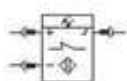


HPE12PE3C

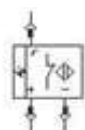


VPE12PE3C

Normally Closed Receiver 3 wire with connector

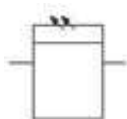


HPE12PE3RC

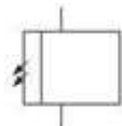


VPE12PE3RC

Normally Closed Receiver 3 wire 180 with connector

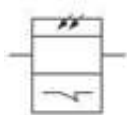


HPE11B14

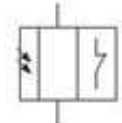


VPE11B14

Normally Open Receiver - AC Driven

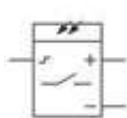


HPE12B14

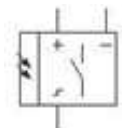


VPE12B14

Normally Closed Receiver - AC Driven

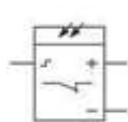


HPE11B15

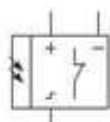


VPE11B15

Normally Open Receiver - DC Driven



HPE12B15



VPE12B15

Normally Closed Receiver - DC Driven

Photoelectric Emitter/Receiver Switches

Horizontal Symbol

Vertical Symbol

Description

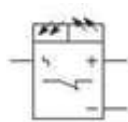


HPE11B16

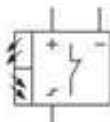


VPE11B16

Normally Open Emitter-Receiver - DC Driven

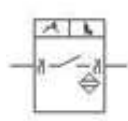


HPE12B16

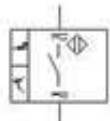


VPE12B16

Normally Closed Emitter-Receiver - DC Driven

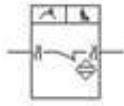


HPE11B22

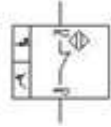


VPE11B22

Normally Open Emitter-Receiver AC/DC Driven 2 PIN

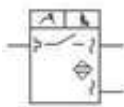


HPE12B22

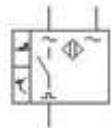


VPE12B22

Normally Closed Emitter-Receiver AC/DC Driven 2 PIN



HPE11B23

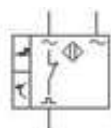


VPE11B23

Normally Open Emitter-Receiver AC Driven 3 PIN



HPE12B23

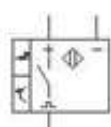


VPE12B23

Normally Closed Emitter-Receiver AC Driven 3 PIN



HPE11B24



VPE11B24

Normally Open Emitter-Receiver DC Driven 3 PIN

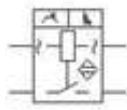


HPE12B24

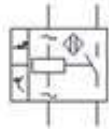


VPE12B24

Normally Closed Emitter-Receiver DC Driven 3 PIN

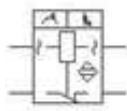


HPE11B25

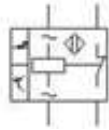


VPE11B25

Normally Open Emitter-Receiver AC Driven 4 PIN

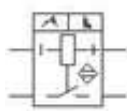


HPE12B25

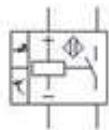


VPE12B25

Normally Closed Emitter-Receiver AC Driven 4 PIN

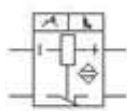


HPE11B26

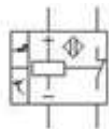


VPE11B26

Normally Open Emitter-Receiver DC Driven 4 PIN

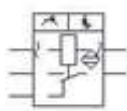


HPE12B26



VPE12B26

Normally Closed Emitter-Receiver DC Driven 4 PIN

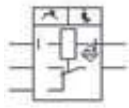


HPE13B25SC

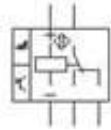


VPE13B25SC

FORM C Emitter-Receiver AC Driven 5 PIN



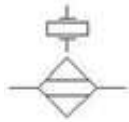
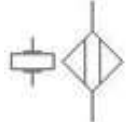
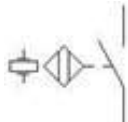
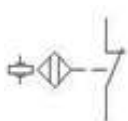
HPE13B26SC



VPE13B26SC

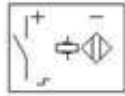
FORM C Emitter-Receiver DC Driven 5 PIN

Ultrasonic Switches

Horizontal Symbol	Vertical Symbol	Description
		Ultrasonic
		Ultrasonic Switch, Normally Open
		Ultrasonic Switch, Normally Closed



HPX11U3

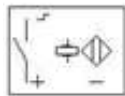


VPX11U3

Normally Open 3 Wire

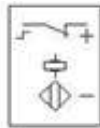


HPX11U3R

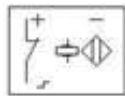


VPX11U3R

Normally Open 3 Wire 180

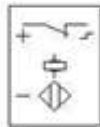


HPX12U3

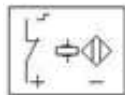


VPX12U3

Normally Closed 3 Wire

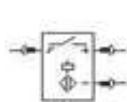


HPX12U3R

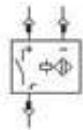


VPX12U3R

Normally Closed 3 Wire 180

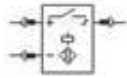
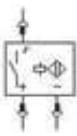


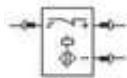
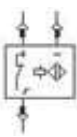
HPX11U3C

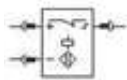
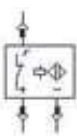


VPX11U3C

Normally Open 3 Wire with connector

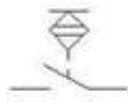
		Normally Open 3 Wire 180 with connector
HPX11U3RC	VPX11U3RC	

		Normally Closed 3 Wire with connector
HPX12U3C	VPX12U3C	

		Normally Closed 3 Wire 180 with connector
HPX12U3RC	VPX12U3RC	

Touch Switches

Horizontal Symbol	Vertical Symbol	Description
		Touch
HPX1TS	VPX1TS	



HPX11TS



VPX11TS

Touch Sense Proximity Switch, Normally Open



HPX12TS

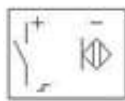


VPX12TS

Touch Sense Proximity Switch, Normally Closed

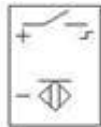


HPX11TS3

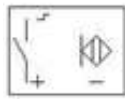


VPX11TS3

Normally Open 3 Wire



HPX11TS3R

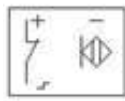


VPX11TS3R

Normally Open 3 Wire 180



HPX12TS3



VPX12TS3

Normally Closed 3 Wire

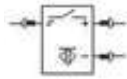


HPX12TS3R

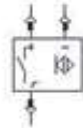


VPX12TS3R

Normally Closed 3 Wire 180

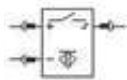


HPX11TS3C

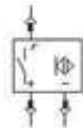


VPX11TS3C

Normally Open 3 Wire with Connector



HPX11TS3RC

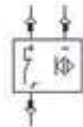


VPX11TS3RC

Normally Open 3 Wire 180 with Connector



HPX12TS3C

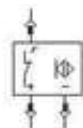


VPX12TS3C

Normally Closed 3 Wire with Connector



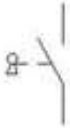
HPX12TS3RC

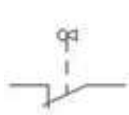


VPX12TS3RC

Normally Closed 3 Wire 180 with connector

Miscellaneous Switches

Horizontal Symbol	Vertical Symbol	Description
 HSW11	 VSW11	Generic Switch, Normally Open
 HSW12	 VSW12	Generic Switch, Normally Closed
 HFL11	 VFL11	Float/Level Switch, Normally Open
 HFL12	 VFL12	Float/Level Switch, Normally Closed
 HPB11KS	 VPB11KS	Key Switch, Normally Open



HPB12KS



VPB12KS

Key Switch, Normally Closed



HPB11KSL



VPB11KSL

Key Switch Latched, Normally Open



HPB12KSL



VPB12KSL

Key Switch Latched, Normally Closed

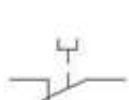


HPC11



VPC11

Pull Cord Switch, Normally Open

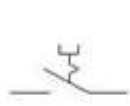


HPC12



VPC12

Pull Cord Switch, Normally Closed



HPC11L



VPC11L

Pull Cord Switch Latched, Normally Open



HPC12L



VPC12L

Pull Cord Switch Latched, Normally Closed



HFT11

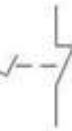


VFT11

Foot Switch, Normally Open



HFT12



VFT12

Foot Switch, Normally Closed



HFT11L



VFT11L

Foot Switch Latched, Normally Open



HFT12L



VFT12L

Foot Switch Latched, Normally Closed



HPB11LS

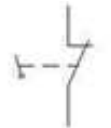


VPB11LS

Lever Switch, Normally Open



HPB12LS



VPB12LS

Lever Switch, Normally Closed



HPB11LSL



VPB11LSL

Lever Switch Latched, Normally Open

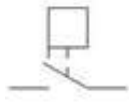


HPB12LSL



VPB12LSL

Lever Switch Latched, Normally Closed

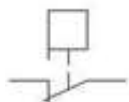


HFS11



VFS11

Flow Switch Normally Open

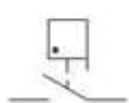


HFS12



VFS12

Flow Switch Normally Closed

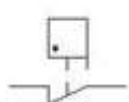


HFS11S20

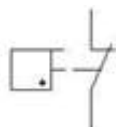


VFS11S20

Flow Switch Normally Open - Gas

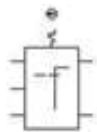


HFS12S20

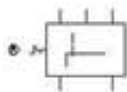


VFS12S20

Flow Switch Normally Closed - Gas

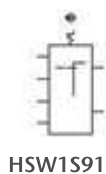


HSW1S90

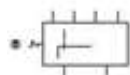


VSW1S90

3 Voltage Phase Switch

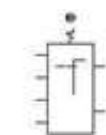


HSW1S91

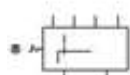


VSW1S91

3 Voltage Phase-to-Neutral Switch



HSW1S92

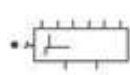


VSW1S92

3 Voltage Phase-to-Phase and Phase-to-Neutral Switch

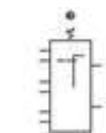


HSW1S93

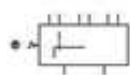


VSW1S93

3 Voltage, 2-Network Phase-to-Phase Switch

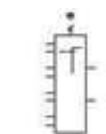


HSW1S94

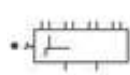


VSW1S94

Current Switch For 3 Measurement Points



HSW1S95



VSW1S95

Current Switch For 4 Measurement Points



HSW1SC21_F



VSW1SC21_F

Change-Over Contact with Mechanical Block and Manual Unlatching



HSW1SC7_F



VSW1SC7_F

Transfer Make Before Break Contact



HSW1S53



VSW1S53

Voltmetric Commutator



HSW21



VSW21

2nd+ Normally Open Contact



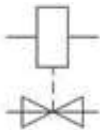
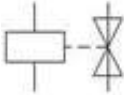
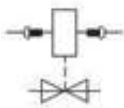
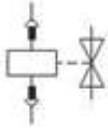
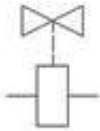
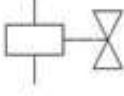
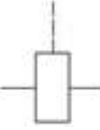
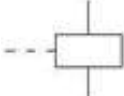
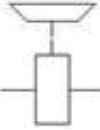
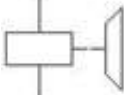
HSW22



VSW22

2nd+ Normally Closed Contact

Solenoids

Horizontal Symbol	Vertical Symbol	Description
 HSV1	 VSV1	Standard Solenoid Valve
 HSVC1	 VSVC1	Standard Solenoid Valve with Connection
 HSV1Y1	 VSV1Y1	Open Solenoid Valve - Closing
 HSV1Y1A	 VSV1Y1A	Open Solenoid Valve - Closing According to Solenoid
 HSV1Y3	 VSV1Y3	Magnetic Brake



HSV1Y4



VSV1Y4

Electromagnetic Brake



HSV21



VSV21

Solenoid Valve Auxiliary Normally Open Contact



HSV22



VSV22

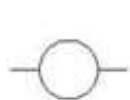
Solenoid Valve Auxiliary Normally Closed Contact

Instrumentation and Sensors

Horizontal Symbol

Vertical Symbol

Description

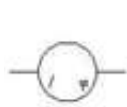


HVM1



VVM1

Voltage Meter



HAM1



VAM1

Amperage Meter



HIN1PFM



VIN1PFM

Power Factor Meter



HIN1PHM



VIN1PHM

Phase Meter



HIN1FRM

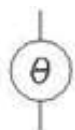


VIN1FRM

Frequency Meter

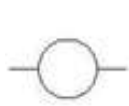


HIN1THM



VIN1THM

Thermometer

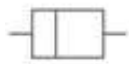


HIN1TAC

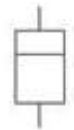


VIN1TAC

Tachometer

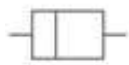


HIN1HRM

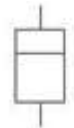


VIN1HRM

Hour Meter

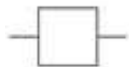


HIN1AHM

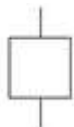


VIN1AHM

Ampere-Hour meter



HIN1P17



VIN1P17

Recording Wattmeter



HIN1P21



VIN1P21

Varmeter

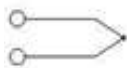


HIN1P11



VIN1P11

Synchronoscope



HTC1L



VTC1L

Thermocouple

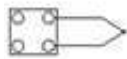


HTC1R



VTC1R

Thermocouple

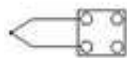


HTC1LTB



VTC1LTB

Thermocouple with Terminal Board

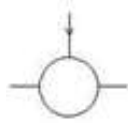


HTC1RTB

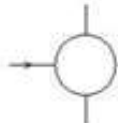


VTC1RTB

Thermocouple with Terminal Board

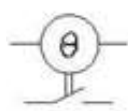


HIN1P19

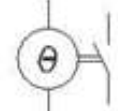


VIN1P19

Active Power Indicator



HIN1P25



VIN1P25

Thermometer/Pyrometer



HIN1P29



VIN1P29

Clock



HIN1P33



VIN1P33

Normally Open Clock Closing Every Minute



HVM1P7

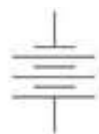


VVM1P7

Differential Voltmeter



HPW1G4



VPW1G4

Accumulator Battery

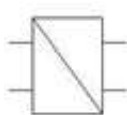


HIN1B10

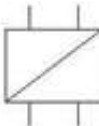


VIN1B10

Pressure/Current Converter



HIN1G1



VIN1G1

AC-DC Current Converter Single Phase

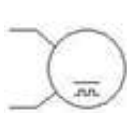


HIN1B11



VIN1B11

Tachometric Dynamo



HIN1B12



VIN1B12

Tachometric Dynamo - Impulse



HIN1B13



VIN1B13

Tachometric Dynamo - Optical Type

Qualifying Symbols

Operating Devices

Symbol	Description
	Positive Operation Direction
Q070109	
	Manual Command General Sign
Q021301	
	Manual Command with Protected Access
Q021302	



Push Button Command

Q021305



Emergency Command

Q021308



Rotary Command

Q021304



Command with Key

Q021313



Foot Actuated Command

Q021310



Lever Command

Q021311



Crank Command

Q021214



Fixed Manual Command

Q021312



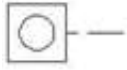
Manual Command with Wheel

Q021309



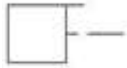
Actuated by the Level of a Fluid

Q021401



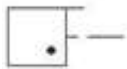
Actuated by the Number of Events

Q021402



Actuated by a Flow of Fluid

Q021403



Actuated by a Gas Flow

Q021404



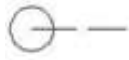
Motorized Command

Q021326



Timing Command

Q021327



Command with Roll

Q021315



Command with Cam

Q021316



Cam Profile

Q021317



Switch Position Function

Q070106



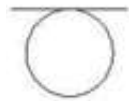
Switch Position (Flipped)

Q070106R



Disconnecter Isolator

Q070103



Switch Disconnecter Isolator

Q070104



Circuit Breaker Function

Q070102



Power Contactor Function

Q070101



Auto Trip Function

Q070105



Auto Return (Spring Return)

Q070107



Non Auto Return (Stay)

Q070108

Linear Direction of Force or Motion

Symbol	Description
	One Way Force Or Movement
Q020401	
	Two Way Force Or Movement
Q020402	



Transition

Q101101

Rotative Direction of Force or Motion

Symbol

Description



One Way Force Or Movement

Q020403



Two Way Force Or Movement

Q020404



Limited Two Way Force Or Movement

Q020405

Propagation Flow or Signal

Symbol	Description
	One Way Propagation
Q020501	
	Two Way Simultaneous Transmission Propagation
Q020502	
	Two Way Alternate Transmission Propagation
Q020503	
	Signal Transmission
Q020504	
	Signal Reception
Q020505	

Energy Flow

Symbol	Description
	Outbound Energy Flux
Q020506	
	Inbound Energy Flux
Q020507	
	Inbound and Outbound Energy Flux
Q020508	

Effect

Symbol	Description
	Thermal Effect
Q020801	



Q020802

Magnetic Effect



Q020803

Magnetostriction Effect



Q020804

Magnetic Field Effect

Radiation

Symbol

Description



Q020901

Non Ionizing Coherent Electromagnetic Radiation



Non Ionizing Coherent Radiation

Q020902



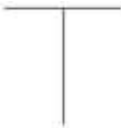
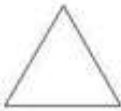
Ionizing Radiation

Q020903

Fault

Symbol	Description
	Indication Of Presumed Location Of Failure
Q021701	
	Failure For Lack Of Insulation
Q021702	

Winding

Symbol	Description
 Q060201	2 Phase Winding
 Q060202	3 Phase Partial V Winding
 Q060203	4 Phase Winding with Accessible Ground
 Q060204	3 Phase T Winding
 Q060205	3 Phase Delta Winding



3 Phase Open Delta Winding

Q060206



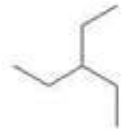
3 Phase Star Winding

Q060207



3 Phase Star Winding with Accessible Ground

Q060208



3 Phase Zigzag Winding

Q060209



Esaphase Winding with Double Delta

Q060210



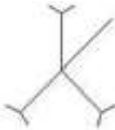
Esaphase Polygonal Winding

Q060211



Esaphase Star Winding

Q060212



Esaphase Double Zigzag Winding with Accessible Ground

Q060213



DC Direct Current Indication

Q020201



DC Direct Current Indication

Q020203



Indication of Rectified Current with an Alternate Component

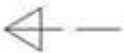
Q020212



AC Alternate Current Indication

Q020204

Mechanical Controls

Symbol	Description
	Auto Return
Q021207	
	Auto Non Return Stop Latch
Q021208	



Stop Latch in Neutral Position

Q021209



Stop Latch Engaged

Q021210



Interlock Between Two Devices

Q021211

Mechanical Controls, Latching Device

Symbol

Description



Latch Device Engaged

Q021212



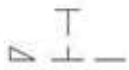
Latch Device in Neutral Position

Q021213



Two Ways Latch Device

Q1020603



Latch Device with Manual Unlatching

Q1020604



Two Ways Latch Device with Key

Q1029603

Mechanical Controls, Coupling

Symbol	Description
--------	-------------



Clutch Joint

Q021216



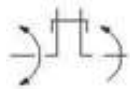
Disconnected Joint

Q021217



Engaged Joint

Q021218



Engaged Joint

Q021219

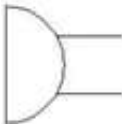
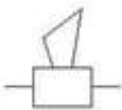
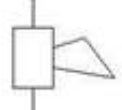


Gear Joint

Q021223

Miscellaneous

Miscellaneous

Horizontal Symbol	Vertical Symbol	Description
 HAN1B	 VAN1B	Bell
 HAN1Z	 VAN1Z	Buzzer
 HAN1H	 VAN1H	Horn
 HAN1S	 VAN1S	Siren



HAN1W

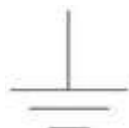


VAN1W

Whistle



HGND2



VGND2

Earth/Ground



HGND3



VGND3

Functional Earth



HGND4



VGND4

Protective Earth



HGND5



VGND5

Protective equipotential bond



HGND1

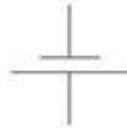


VGND1

Functional Equipotential Bond



HBA1

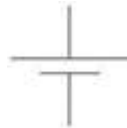


VBA1

Battery

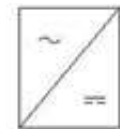


HBA1R



VBA1R

Battery (Flipped)



HPW1_1PH



VPW1_1PH

Power Source 1 Phase



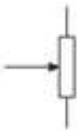
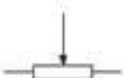
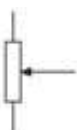
HPW1_3PH

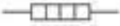
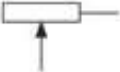
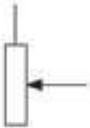


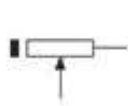
VPW1_3PH

Power Source 3 Phase

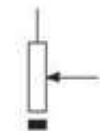
Electronics

Horizontal Symbol	Vertical Symbol	Description
		Fixed Resistor
HRE1B	VRE1B	
		Variable Resistor
HVR1B	VVR1B	
		Variable Resistor
HVR1BR	VVR1BR	
		Variable Resistor 2
HVR1R2	VVR1R2	
		Light dependent
HRE1LDR	VRE1LDR	

		Heater Element
HRE1HT	VRE1HT	
		2nd+ Element
HRE2HT	VRE2HT	
		RC Network
HRE1RCN	VRE1RCN	
		Varistor
HVR1R3	VVR1R3	
		Resistor with Mobile Contact
HVR1R4	VVR1R4	



HVR1R5



VVR1R5

Resistor with Mobile Contact and Disconnecting Position



HVR1R7



VVR1R7

Shunt



HVR1R8



VVR1R8

Variable Resistor with Carbon Disks



HDI1



VDI1

Diode



HDI1R



VDI1R

Diode 180



HDI1B4



VDI1B4

Diode Photosensitive



HDI1B5



VDI1B5

Diode Photosensitive 2

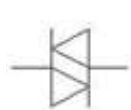


HDI1V2

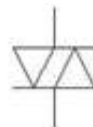


VDI1V2

Zener Diode - One Way



HDI1V3



VDI1V3

Diac Diode Two Way



HDI1BR

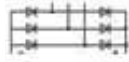


VDI1BR

Bridge rectifier



HDI1V5



VDI1V5

3 Phase Bridge Rectifier



HDI1V4



VDI1V4

SCR



HCA1

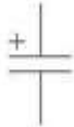


VCA1

Capacitor



HCA1EL

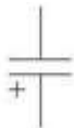


VCA1EL

Electrolytic



HCA1ELR



VCA1ELR

Electrolytic 180

		Feedthrough Capacitor
HCA1C2	VCA1C2	

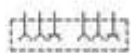
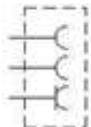
		Photosensitive PNP Transistor
HDV1B6	VDV1B6	

Cable Markers

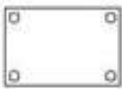
Horizontal Symbol	Vertical Symbol	Description
		Cable Marker
HW01	VW01	
		2nd+ Child Marker
HW02	VW02	

		Extra Marker
HT0_CABLE	VT0_CABLE	
		Twisted Pair
HT0_TW	VT0_TW	

Power Receptacles

Horizontal Symbol	Vertical Symbol	Description
		Duplex Receptacle
HCN1RDUP	VCN1RDUP	
		Single Receptacle
HCN1RSGL	VCN1RSGL	

Generic Device Boxes

Horizontal Symbol	Vertical Symbol	Description
		4 Terminals
HDV1TFL	VDV1TFL	
		3 Terminals
HDV1TC	VDV1TC	
		3 Terminals
HDV1TB	VDV1TB	
		2 Terminals
HDV1T6	VDV1T6	
		4 Terminals
HDV1TF	VDV1TF	



HDV1TE



VDV1TE

3 Terminals



HDV1T7



VDV1T7

3 Terminals

Stand-alone Cross-reference Symbols

Symbol	Description
	Source Rectangle
HA2S1_REF	
	Source Hexagon
HA3S1_REF	



Source Ellipse

HA5S1_REF



Destination Rectangle

HA2D1_REF



Destination Hexagon

HA3D1_REF



Destination Ellipse

HASD1_REF

Wire Arrows - Reference Only

Symbol	Description
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Generic Arrow - Left

HA1X1



Generic Arrow - Up

HA1X2



Generic Arrow - Right

HA1X3



Generic Arrow - Down

HA1X4



Arrow Tail - Left

HA1X1Y



Arrow Tail - Up

HA1X2Y



Arrow Tail - Right

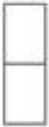
HA1X3Y



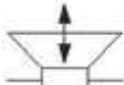
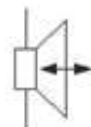
Arrow Tail - Down

HA1X4Y

Splice Symbols

Horizontal Symbol	Vertical Symbol	Description
		Splice
HSP1001	VSP1001	

Annunciations

Horizontal Symbol	Vertical Symbol	Description
 HAN1B7	 VAN1B7	Loudspeaker
 HAN1B8	 VAN1B8	Loudspeaker - Microphone
 HAN1B9	 VAN1B9	Microphone

One-Line Components

Connector

Horizontal Symbol	Vertical Symbol	Description
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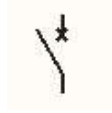
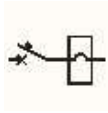
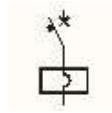
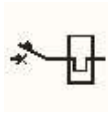
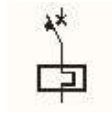
HC01PL_1-



VC01PL_1-

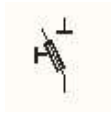
Jack/Plug

Motor Control

Horizontal Symbol	Vertical Symbol	Description
		Circuit breaker
		Motor circuit protector
		Thermal circuit breaker
		Disconnect



HDS11F_1-



VDS11F_1-

Fused disconnect

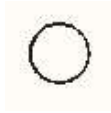


HFU1_1-

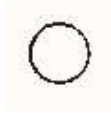


VFU1_1-

Fuse



HMO13_1-



VMO13_1-

Motor

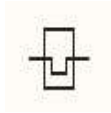


HMS11_1-



VMS11_1-

Motor starter



HOL1_1-



VOL1_1-

Overload



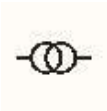
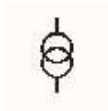
HCA113_1-



VCA113_1-

Capacitor

Transformer

Horizontal Symbol	Vertical Symbol	Description
		Transformer 1
HXF1_1-	VXF1_1-	
		Transformer 2
HXF2_1-	VXF2_1-	

Terminal

Horizontal Symbol	Vertical Symbol	Description
		Square terminal
HT0001_1-	VT0001_1-	
		Round terminal
HT0002_1-	VT0002_1-	

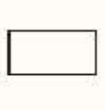
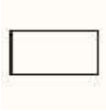
Cable Marker

Horizontal Symbol	Vertical Symbol	Description
		Cable marker
HW01_1-	VW01_1-	

Bus-tap

Horizontal Symbol	Vertical Symbol	Description
		Bus-tap - main/dot
HDM_BT_1-	VDM_BT_1-	
		Bus-tap - dual/tee
HDM_BT_1-	VDM_BT_1-	
		Bus-tap - dual/corner
HDM_BT_1-	VDM_BT_1-	

Miscellaneous

Horizontal Symbol	Vertical Symbol	Description
		Power receptacle
HCOTWR_1-	VCOTWR_1-	
		Generic load
HDV1_1-	VDV1_1-	