

2. SELECT A BASE

3. SELECT A RECEPTACLE

PLUG-IN BASES (pages 602-603)		Models
AC/DC	10.8-140 VDC/18-140 VAC 4-wire FET w/output indicator	MPS18HD ⚡
DC	10-30 VDC emitter base only	MPS30HD
	10-30 VDC NPN and PNP, 4-wire DC	MPS33HD ⚡
	10-30 VDC NPN N.O./N.C., 4-wire DC	MPS31HD ●
	10-30 VDC PNP, 3-wire DC	MPS32HD ●
AC	198-264 VAC 4-wire solid state AC relay 1 A max.	MPS12HD
	198-264 VAC emitter base only	MPS13HD
	92-132 VAC 4-wire bilateral FET (AC/DC) 100 mA max.	MPS17HD ●
	92-132 VAC 4-wire solid state AC relay 1 A max.	MPS11HD ⚡
	92-132 VAC emitter base only	MPS10HD ●

RECEPTACLE	Models
Standard 4-terminal, 1/2" NPT conduit thread	MPB20 ⚡
5-pin mini connector	MPB22 ●
4-pin micro connector	MPB27 ○

AC DPDT RELAY BASE (page 603)		Model
RELAY	DPDT, 92-132 VAC, 5 A, output indicator	MPSD11HD ⚡

DPDT RECEPTACLE	Models
8-terminal, 1/2" NPT conduit hole	MPB23 ●
8-terminal, 3/4" NPT conduit hole	MPB24

SPDT RELAY BASES (page 604)		Models
DC	SPDT, 10-30 VDC, 6 A	MPV31HD ●
SPDT RELAY AC	SPDT, 103-132 VAC, 6 A	MPV11HD
	SPDT, 192-264 VAC, 6 A	MPV12HD
	SPDT, 20-260 VAC/VDC, 6 A	MPV14HD ●
	SPDT, 22-26 VAC, 6 A	MPV13HD

NO RECEPTACLE NEEDED

MINI STYLE BASES (pages 605-607)		Models
3-WIRE DC	10-30 VDC, 2 m preleaded cable, emitter base only	▲ MPT30HD
	10-30 VDC, NPN N.O., 2 m preleaded cable	▲ MPT31HD ●
	10-30 VDC, PNP N.O., 2 m preleaded cable	▲ MPT32HD
	10-30 VDC, NPN and PNP, N.O., 2 m preleaded cable	▲ MPT33HD ⚡
4-WIRE AC	92-132VAC, 2m preleaded cable, emitter base only	▲ MPT10HD
	92-132 VAC, 4-wire bilateral FET (AC/DC), 100 mA max., 2 m preleaded cable	▲ MPT17HD
	92-132 VAC, 4-wire solid state AC relay, 0.5 A max., 2 m preleaded cable	▲ MPT11HD
AC/DC	22-26 VAC/VDC, 4-wire bilateral FET, 100 mA max., 2 m preleaded cable	▲ MPT16HD ●
MICRO CONNECT. DC	10-30 VDC, NPN N.O., 4-pin micro connector	○ MPT41HD-CM
	10-30 VDC, PNP N.O., 4-pin micro connector	○ MPT42HD-CM ●
	10-30 VDC, NPN and PNP, N.O., 4-pin micro connector	○ MPT43HD-CM ⚡
	10-30 VDC, 4-pin micro connector, emitter base only	○ MPT40HD-CM
MINI CONNECT. DC	10-30 VDC, NPN and PNP, 4-pin mini connector	● MPT43HD ⚡
	10-30 VDC, NPN N.O., 4-pin mini connector	● MPT41HD
	10-30 VDC, PNP N.O., 4-pin mini connector	● MPT42HD ●
MINI CONNECT. AC	92-132 VAC, 3-pin mini connector, emitter base only	● MPT20HD
	92-132 VAC, 4-wire solid state AC relay, 0.5 A max., 5-pin mini connector	● MPT21HD ●
	92-132 VAC, 4-wire bilateral FET (AC/DC), 100 mA max., 5-pin mini connector	● MPT27HD ●
MINI AC/DC	10.8-140 VDC/18-140 VAC, 4-wire FET w/output ind., 5-pin mini connector	● MPT28HD
MINI RELAY AC	92-132 VAC, 6 A, SPDT relay, 2 m preleaded cable	▲ MPW11HD ●
	92-132 VAC, 6 A, SPDT relay, 5-pin mini connector	● MPW21HD

ELECTRICAL CONNECTION KEY

■	Terminal connectors
●	Mini connectors
○	Micro connectors
▲	Preleaded cable

NO RECEPTACLE NEEDED

ANALOG PLUG-IN BASE (page 608)		Model
ANALOG	12-24 VDC analog output (0-5 VDC or 4-20 mA)	MPS35HD

RECEPTACLE	Models
Standard 4-terminal, 1/2" NPT conduit thread	MPB20 ⚡
5-pin mini connector	MPB22 ●

2-WIRE PLUG-IN BASES (page 609)		Models
DC	10-30 VDC emitter base only	MPS30HD
2-WIRE AC	92-132 VAC emitter base only	MPS10HD ●
	198-264 VAC emitter base only	MPS13HD
	22-26 VAC/VDC emitter base only	MPS14HD
	22-260 VAC plug-in base	MP2S11HD ⚡

- ⚡ Stocked item
 - Typical delivery 4 weeks or less
- Consult factory for all other models

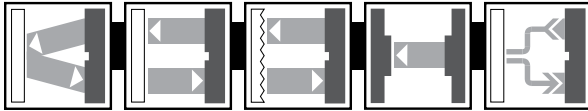


PLUG-IN BASE

Specifications	DC	AC	AC/DC
MODEL NUMBER(S)	MPS30HD†	MPS10HD†	MPS18HD
	MPS31HD	MPS11HD	—
	MPS32HD	MPS12HD	—
	MPS33HD	MPS13HD†	—
	—	MPS17HD	—
OUTPUT	1 NPN (31HD) 1 PNP (32HD) 1 NPN and 1 PNP (33HD)	Solid state relay (11HD/12HD) Thyristor (17HD)	Thyristor
LOAD CURRENT	250 mA max. (31HD/32D) 100 mA max. (33HD)	5 mA-1 A (11HD/12HD) 100 mA max. (17HD)	100 mA max.
LEAKAGE CURRENT	≤ 10 µA	≤ 200 µA (11HD) ≤ 240 µA (12HD) ≤ 10 µA (17HD)	≤ 10 µA
INRUSH CURRENT	—	30 A for 8 ms (11HD/12HD) 250 mA for 8 ms (17HD)	250 mA for 8 ms, (non-repetitive)
VOLTAGE DROP	≤ 1.0 VDC (31HD/32HD) ≤ 0.8 VDC (33HD)	≤ 1.4 VAC at rated load (11HD/12HD) ≤ 3 V at 60 mA (17HD)	≤ 5 VDC (DC operation)
RESPONSE TIME*	≤ 10 µs	≤ 10 ms (11HD/12HD) ≤ 2 ms (17HD)	≤ 2 ms
SHORT CIRCUIT AND OVERLOAD PROTECTION	No (30HD/31HD/32HD) Yes (33HD)	No	No
REVERSE POLARITY PROTECTION	Yes	No	No
SUPPLY VOLTAGE	10-30 VDC	92-132 VAC, 50/60 Hz (10HD/11H/17HD) 198-264 VAC, 50/60 Hz (12HD/13HD)	10.8-140 VDC 18-140 VAC, 50/60 Hz
CURRENT CONSUMPTION	≤ 25 mA	≤ 70 mA	≤ 50 mA
ELECTRICAL CONNECTION	Dependent on receptacle selection	Dependent on receptacle selection	Dependent on receptacle selection
ADDITIONAL DATA	See page 603		




*NOTE: Total response time is the sum of the sensor head and base response times.

†NOTE: Emitter base only.



PLUG-IN BASE

Plug-in Base Specifications

TEMPERATURE RANGE	<i>WORKING</i>	-22 °F to +158 °F
	<i>STORAGE</i>	-67 °F to +185 °F
SHOCK		50 G
VIBRATION		10 G, 10-500 Hz
HUMIDITY RANGE		95% RH (non-condensing)
HEAD/BASE SEAL		Santoprene
RECEPTACLE/BASE SEAL		Buna-N
PROTECTION (IEC)		IP69K when all components are properly assembled
HOUSING MATERIAL		Glass-filled Polysulfone
STANDARDS		EN 60947-5-2
APPROVALS		  

RECEPTACLE MODELS




MPB20	Standard 4-terminal, 1/2" NPT conduit thread
MPB22	5-pin mini connector
MPB27	4-pin micro connector



See pages
803-854 for
cordsets

DPDT RELAY BASE

Specifications

	AC	
MODEL NUMBER	MPSD11HD	
SUPPLY VOLTAGE	92-132 VAC, 50/60 Hz	
OUTPUT	DPDT relay	
ELECTRICAL CONTACT RATING	250 VAC/5 A	
POWER CONSUMPTION	≤ 6.6 VA	
MECHANICAL LIFE OF RELAY	5 x 10 ⁷ operations	
RESPONSE TIME*	≤ 10 ms	
PROTECTION (IEC)	IP69K when all components are properly assembled	
TEMPERATURE RANGE	<i>WORKING</i>	-22 °F to 158 °F
	<i>STORAGE</i>	-67 °F to 185 °F
SHOCK	10G	
VIBRATION	6 G, 10-55 Hz @ double amplitude of 1 mm	
HUMIDITY	95% RH (non-condensing)	
HOUSING MATERIAL	Glass-filled Polysulfone	
STANDARDS	EN 60947-5-2	
APPROVALS	  	
ELECTRICAL CONNECTION	dependent on receptacle selection	

*NOTE: Total response time is the sum of the sensor head and base response times.

DPDT RECEPTACLE MODELS

MPB23	8-terminal, 1/2" NPT conduit thread
MPB24	8-terminal, PG 13.5 conduit thread

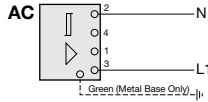
Wiring Diagrams

AC

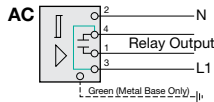


Terminal Connection

Model: MPS10HD

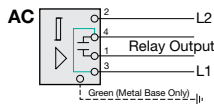


Model: MPS11HD



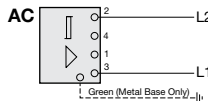
NOTE: Pins 3 and 4 must be jumpered (jumper wire not included)

Model: MPS12HD

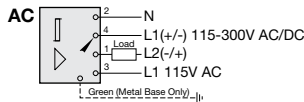


NOTE: Pins 3 and 4 must be jumpered (jumper wire not included)

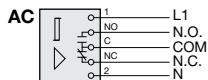
Model: MPS13HD



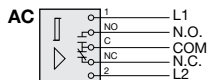
Model: MPS17HD



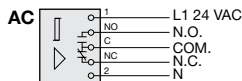
Model: MPV11HD



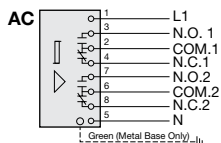
Model: MPV12HD



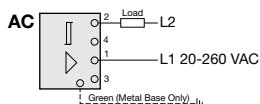
Model: MPV13HD



Model: MPSD11HD



Model: MP2S11HD

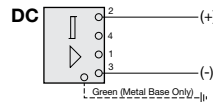


DC

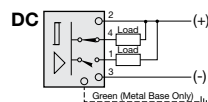


Terminal Connection

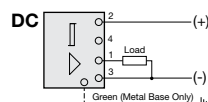
Model: MPS30HD



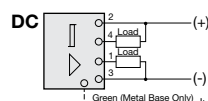
Model: MPS31HD



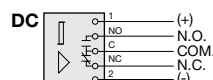
Model: MPS32HD



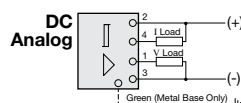
Model: MPS33HD



Model: MPV31HD



Model: MPS35HD

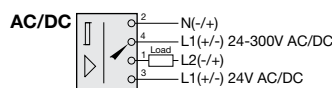


AC/DC

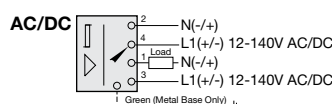


Terminal Connection

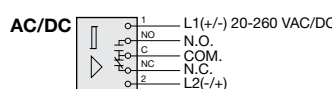
Model: MPS16HD



Model: MPS18HD



Model: MPV14HD

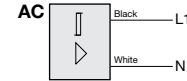


AC

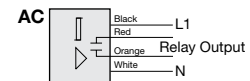


Cable Connection

Model: MPT10HD

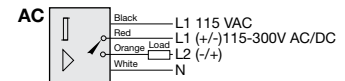


Model: MPT11HD

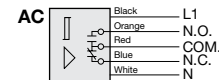


NOTE: Relay also requires AC power

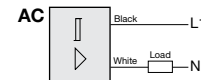
Model: MPT17HD



Model: MPW11HD



Model: MP2T11HD

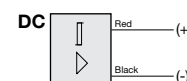


DC

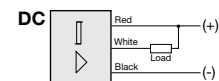


Cable Connection

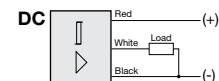
Model: MPT30HD



Model: MPT31HD



Model: MPT32HD



Model: MPT33HD

