

WDP Series Definite Purpose Contactors



Applications

- Air conditioning
- Resistive heating
- Refrigeration equipment
- Motors
- Welding
- Pumps
- Power supplies
- Food service equipment
- Compressors

Certifications

- UL 508 Recognized, File No. E330834
- IEC/EN 60947 Compliant
- Compliance to ARI-780 HVAC standards
- CSA file No. 266851



Features

- Rated current from 25-60A
- 1-, 2-, and 3-pole configurations at 25A, 30A, and 40A
- 3-pole configurations at 50A and 60A
- Enclosed coil standard for all 3-pole frame sizes
- Open coil standard for all 1- and 2-pole frame sizes
- Industry standard mounting plate provides easily accessible mounting holes
- Connection terminal box lug connections each with quick connect/disconnect terminals
- Coil is class B 266 °F [130 °C] insulation system with a wide range of voltages and 50/60 Hz ratings
- Double E magnet assembly provides optimal performance with reduced power consumption
- Base assembly made from high arc-resistant polyester and thermoset plastic
- Temperature range -40 to +158 °F [-40 to +70 °C]
- IP20 rating
- 5 kA SCCR with Fuse or Circuit Breaker:
 - 25A max fuse/CB 60A
 - 30A max fuse/CB 80A
 - 40A max fuse/CB 90A
 - 50A max fuse/CB 100A
 - 60A max fuse/CB 125A

Accessories

Multiple optional auxiliary contact blocks with 250 VAC/VDC or 600 VAC max rating available:

- 1 N.O.+1 N.C. screw terminal
- 1 N.O.+1 N.C. quick connect
- 1 N.O.+1 N.C. quick connect microswitch
- 2 N.O.+2 N.C. quick connect microswitch



WDP 25 Series Contactor



WDP 50 Series Contactor

WDP Series Definite Purpose Contactors



Contactor Specifications

WDP Series 25-40 Amp DP Contactor Specifications																		
Model	Price	Qty.	Poles	FLA (A) 600 VAC max ¹	Resistive Loads @600 VAC (A)	Locked Rotor Amps (A)			Horsepower (hp)					Weight (lb)				
						240/ 277V	480V	600V	1-Phase		3-Phase							
									120V	240/277V	240/277V	480V	600V					
WDP25-1L-120		1 ea.	1 N.O.+Shunt	25	35	150	125	100	1	2	-	-	-	0.51				
WDP25-1L-230															0.64			
WDP25-2L-120			2 N.O.								10	15	20	0.97				
WDP25-2L-230																		
WDP25-3L-120			3 N.O.								10	15	20	0.97				
WDP25-3L-230																		
WDP30-1L-120			1 N.O. +Shunt	32	40	200	150	120	1	2	-	-	-	0.51				
WDP30-1L-230															0.64			
WDP30-1L-24			2 N.O.								10	15	20	0.97				
WDP30-2L-120																		
WDP30-2L-230			3 N.O.								10	15	20	0.97				
WDP30-2L-24																		
WDP30-3L-120																		
WDP30-3L-230																		
WDP30-3L-24																		
WDP30-3L-480																		
WDP40-1L-120			1 N.O.+Shunt	40	50	240	200	160	2	3	-	-	-	0.51				
WDP40-1L-230															0.64			
WDP40-2L-120			2 N.O.								10	20	25	0.97				
WDP40-2L-230																		
WDP40-3L-120			3 N.O.												10	20	25	0.97
WDP40-3L-230																		
WDP40-3L-24																		
WDP40-3L-480																		

Notes: 1-Full load amperage applies at 240/277, 480, and 600V.

WDP Series 50-60 Amp DP Contactor Specifications																
Model	Price	Qty.	Poles	FLA (A) 600 VAC max ¹	Resistive Loads @600 VAC (A)	Locked Rotor Amps (A)			Horsepower (hp)						Weight (lb)	
						240/ 277V	480V	600V	1-Phase			3-Phase				
									110/ 120V	200/ 208V	240/ 277V	200/ 208V	240/ 277V	480V		600V
WDP50-3L-120		1 ea.	3 N.O.	50	65	300	250	200	3	7.5	10	15	15	25	1.28	
WDP50-3L-230																
WDP50-3L-24																
WDP60-3L-120				60	75	360	300	240	5	7.5	10	25	25	30		30
WDP60-3L-230																
WDP60-3L-24																

Notes: 1-Full load amperage applies at 240/277, 480, and 600V.

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Contactor Specifications, continued

WDP Series 25-60 Amp DP Contactor Specifications	
Mechanical Life	500,000 operations
Electrical Life	250,000 operations
Line and Load Terminals	#10-32 Screw/Box Lug
Mounting	Vertical or Horizontal
Operating Temperature	-40 to +70 °C [-40 to +158 °F]
Insulation System	Class B 266 °F [130 °C]
Agency Approvals	UL file #E330834, Standard UL 60947-1, CSA file #266851

Notes: Applies to all WDP series contactors.

Terminal Specifications

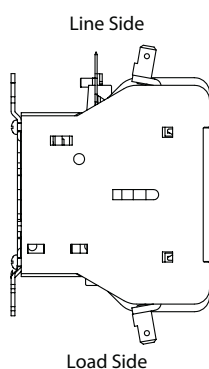
WDP Series 25-60A DP Contactor Terminal Specifications										
Model	Copper Cable AWG (mm ²)				Tightening Torque in-lb [N•m]			Quick Connects ¹		
	Solid Wire w/Single Core		Flexible Stranded Wire		Coil	Main Circuit		Power Terminals	Coil Terminals	0.250 Standard
	Screw	Lug	Screw	Lug		Screw	Lug			
WDP25-1L Series	14-10 (2.5-6)	14-8 (2.5-10)	14-12 (2.5-6)	14-8 (2.5-10)	See note 2	20 [1.8-2]	40 [4-6]	Dual 0.250 QC (2)	Dual 0.250 QC ²	Quad
WDP25-2L Series										Dual or Quad ³
WDP25-3L Series										Dual
WDP30-1L Series	Quad									
WDP30-2L Series	Dual or Quad ³									
WDP30-3L Series	Dual									
WDP40-1L Series	Quad									
WDP40-2L Series	Dual or Quad ³									
WDP40-3L Series	Dual									
WDP50 Series	-	10-6 (6-16)	-	12-8 (4-10)		-	50 [4-7]	Dual 0.250 QC (2)	0.250 QC ²	-
WDP60 Series		10-6 (6-16)		12-8 (4-10)			50 [4-7]	Dual 0.250 QC (2)	0.250 QC ²	

¹ Quick connects (size 6.3mm, female) may be purchased on the web store www.automationdirect.com

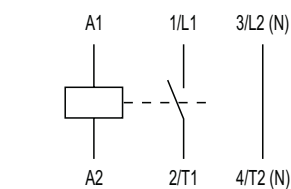
² All coil connections are 0.25in quick-connect terminals only.

³ Quad is standard.

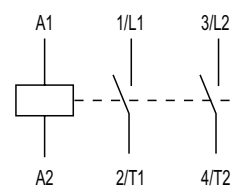
Wiring Diagrams



WDP25~40

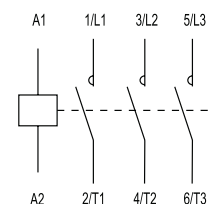


WDP... 1P 1NO+1Shunt



WDP... 2P 2NO

WDP25~60



WDP... 3P 3NO

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Coil Specifications

WDP Series 25-60 Amp DP Contactor Coil Specifications										
Model	Poles	Coil Voltage (50/60 Hz VAC)	Power Consumption ¹ (VA)				Pick-Up Voltage	Drop-Out Voltage		
			50 Hz		60 Hz					
			In-Rush	Sealed	In-Rush	Sealed				
<u>WDP25-1L-120</u>	1 N.O.+Shunt	120	55	13	25	6.7	85-110% Us (see note 2)	20-65% Us (see note 2)		
<u>WDP25-1L-230</u>		230			40	8.8				
<u>WDP25-2L-120</u>	2 N.O.	120			40	8.8				
<u>WDP25-2L-230</u>		230								
<u>WDP25-3L-120</u>	3 N.O.	120	51	12	47	9.3				
<u>WDP25-3L-230</u>		230								
<u>WDP30-1L-120</u>	1 N.O.+Shunt	120	55	13	25	6.7				
<u>WDP30-1L-230</u>		230								
<u>WDP30-1L-24</u>		24								
<u>WDP30-2L-120</u>	2 N.O.	120			40	8.8				
<u>WDP30-2L-230</u>		230								
<u>WDP30-2L-24</u>		24								
<u>WDP30-3L-120</u>	3 N.O.	120	51	12	47	9.3				
<u>WDP30-3L-230</u>		230								
<u>WDP30-3L-24</u>		24								
<u>WDP30-3L-480</u>		480								
<u>WDP40-1L-120</u>	1 N.O.+Shunt	120	55	13	25	6.7				
<u>WDP40-1L-230</u>		230								
<u>WDP40-2L-120</u>	2 N.O.	120			40	8.8				
<u>WDP40-2L-230</u>		230								
<u>WDP40-3L-120</u>	3 N.O.	120	51	12	47	9.3				
<u>WDP40-3L-230</u>		230								
<u>WDP40-3L-24</u>		24								
<u>WDP40-3L-480</u>		480								
<u>WDP50-3L-120</u>	3 N.O.	120	84	14	83	9.3				
<u>WDP50-3L-230</u>		230								
<u>WDP50-3L-24</u>		24								
<u>WDP60-3L-120</u>		120								
<u>WDP60-3L-230</u>		230								
<u>WDP60-3L-24</u>		24								

¹ Power consumption is the same for 24, 120, 240, 277, and 480 VAC.

² Us = Rated control supply voltage, per UL 60947-1

WDP Series Definite Purpose Contactors Accessories



WDP Series Accessories Selection Guide

Model	Type	Contact Arrangement	Connection Type ¹
<u>WDPAXFC11</u>	Auxiliary Contact	1 N.O.+1 N.C.	Screw
<u>WDPAXFC11Q</u>		1 N.O.+1 N.C.	Quick Connect
<u>WDPAXFD11</u>	Microswitch (SPDT)	1 N.O.+1 N.C.	Quick Connect
<u>WDPAXFD22</u>		2 N.O.+2 N.C.	Quick Connect

WDP Series DP Contactors Accessories Specifications

Model	Price	For Use With	Mounting	Wiring	Current Ratings															
					Break (A)				Make (A)				Continous (A)	125 or 250 VAC	120 VAC on Lamp Load	125 VDC	250 VDC			
					120 VAC	240 VAC	480 VAC	600 VAC	120 VAC	240 VAC	480 VAC	600 VAC	120-600 VAC							
<u>WDPAXFC11</u>		WDP25-60 (3-Pole only)	Side mounted ²	#6-32 screw terminal, wire range #14-22 AWG	3	1.50	0.75	0.60	30	15	7.5	6	5	10A, 1/3 hp	4A	1/2A	1/4A			
<u>WDPAXFC11Q</u>				0.250 Quick Connection																
<u>WDPAXFD11</u>		WDP25-40 (3-Pole only)	One switch per side	0.250 Quick Connection										15A, 1/3 hp						
<u>WDPAXFD22</u>			Two switches per side	0.250 Quick Connection																
Agency Approvals	UL file #E330834, Standard UL 60947-1																			

¹ Quick connects (size 6.3mm, female) may be purchased on the web store www.automationdirect.com

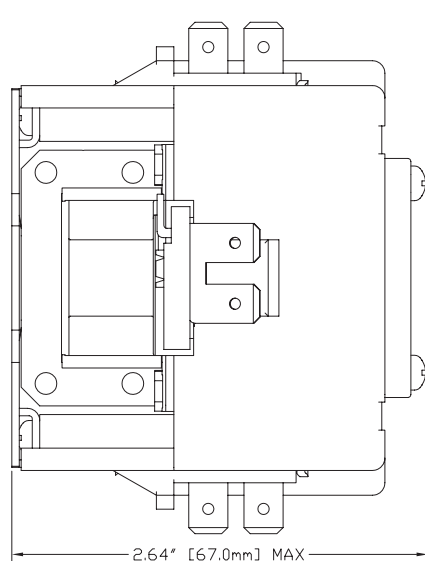
² Maximum of two may be mounted.

WDP Series Definite Purpose Contactors

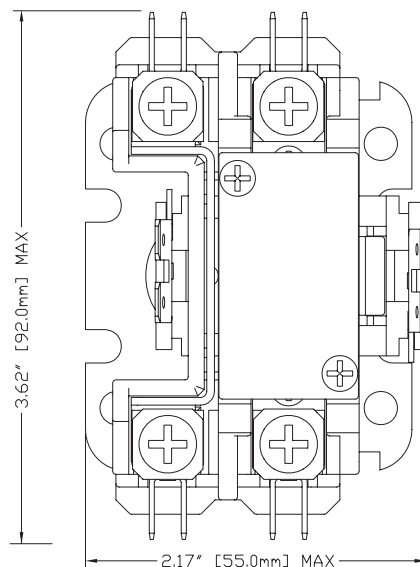


Dimensions (in [mm])

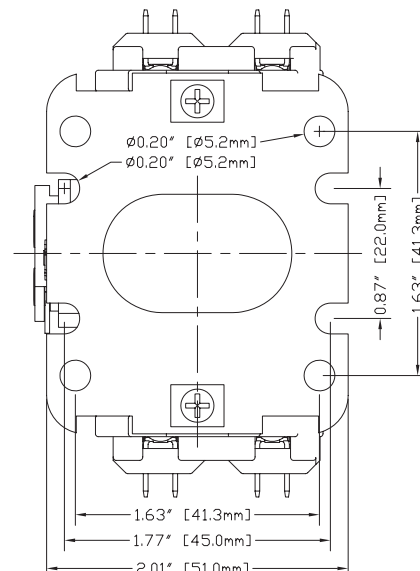
WDP Series 25-40A One Pole Contactors



Side Detail

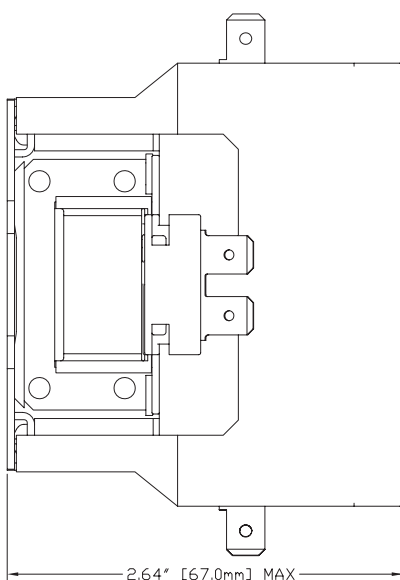


Front Detail

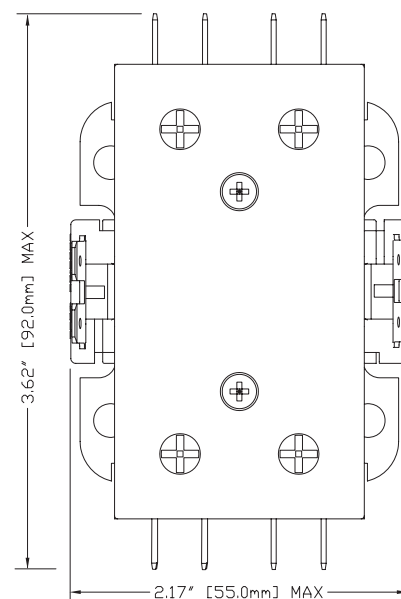


Base Detail

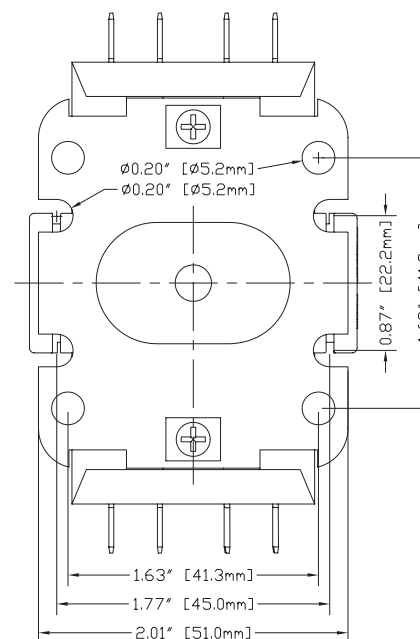
WDP Series 25-40A Two Pole Contactors



Side Detail



Front Detail



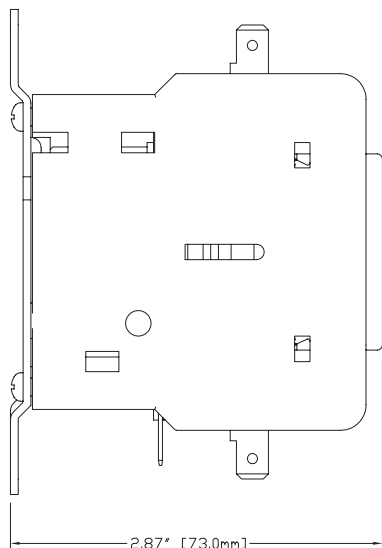
Base Detail

WDP Series Definite Purpose Contactors

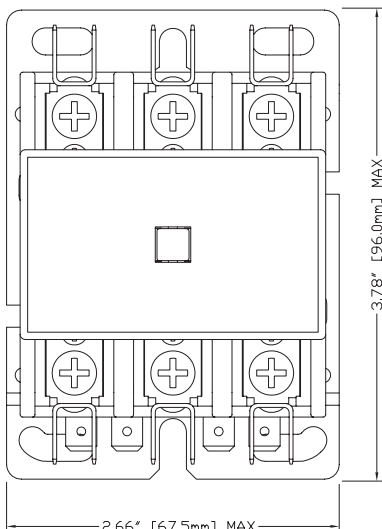


Dimensions (in [mm])

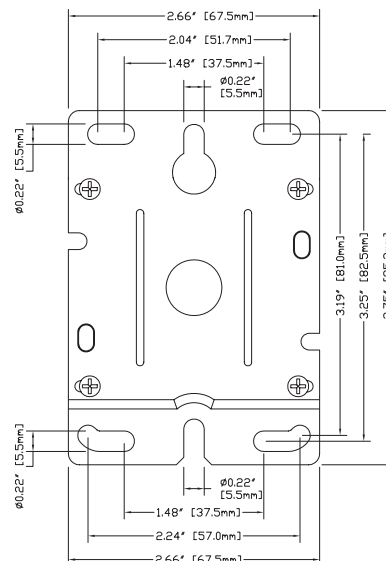
WDP Series 25-40A Three Pole Contactors



Side Detail

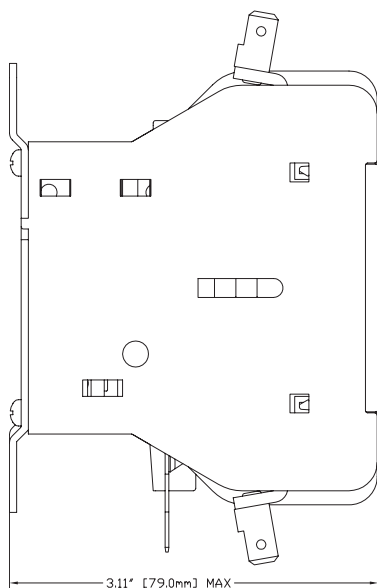


Front Detail

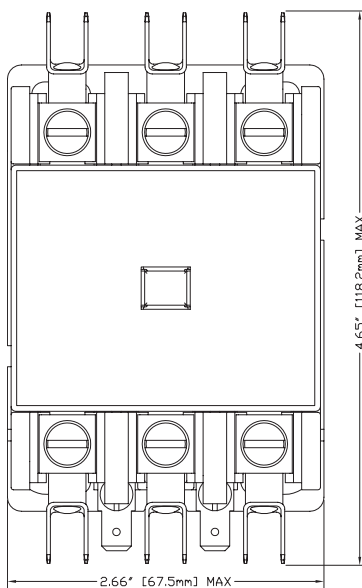


Base Detail

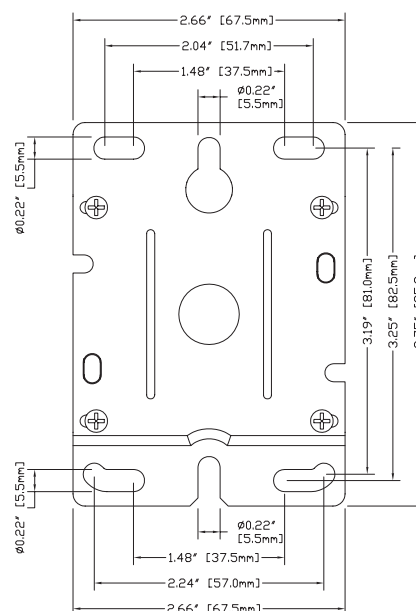
WDP Series 50-60A Three Pole Contactors



Side Detail



Front Detail



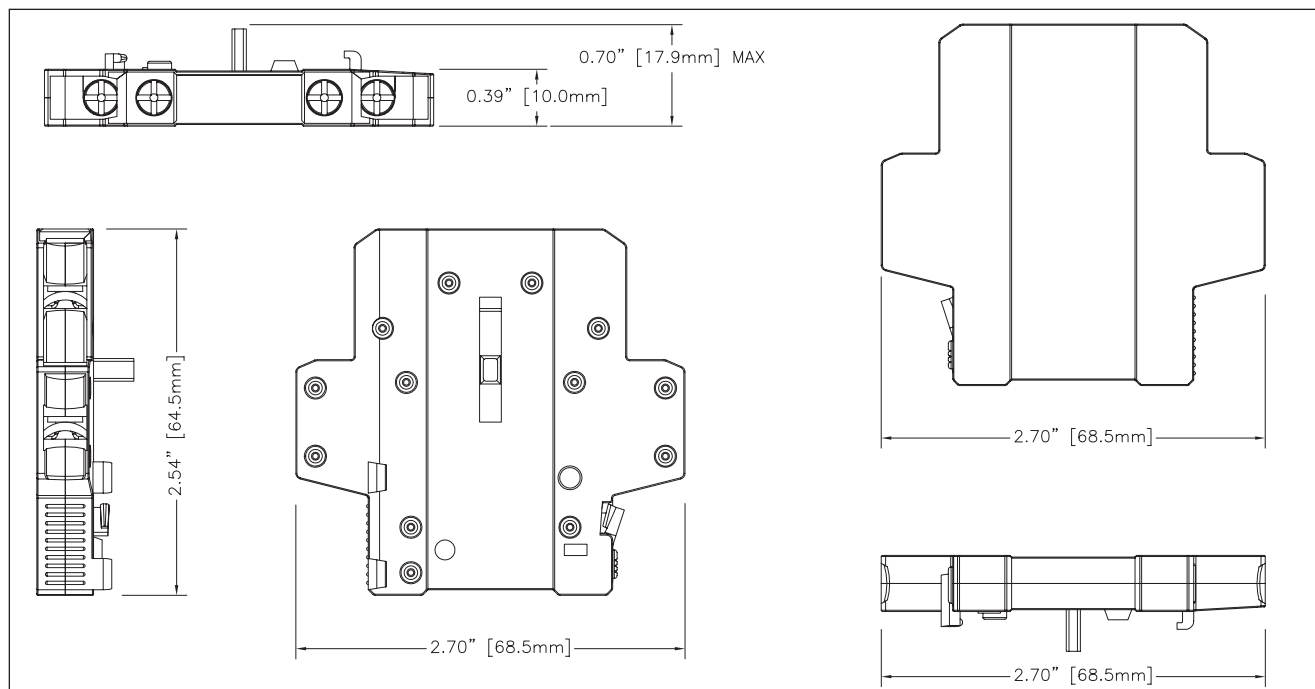
Base Detail

WDP Series Definite Purpose Contactors Accessories

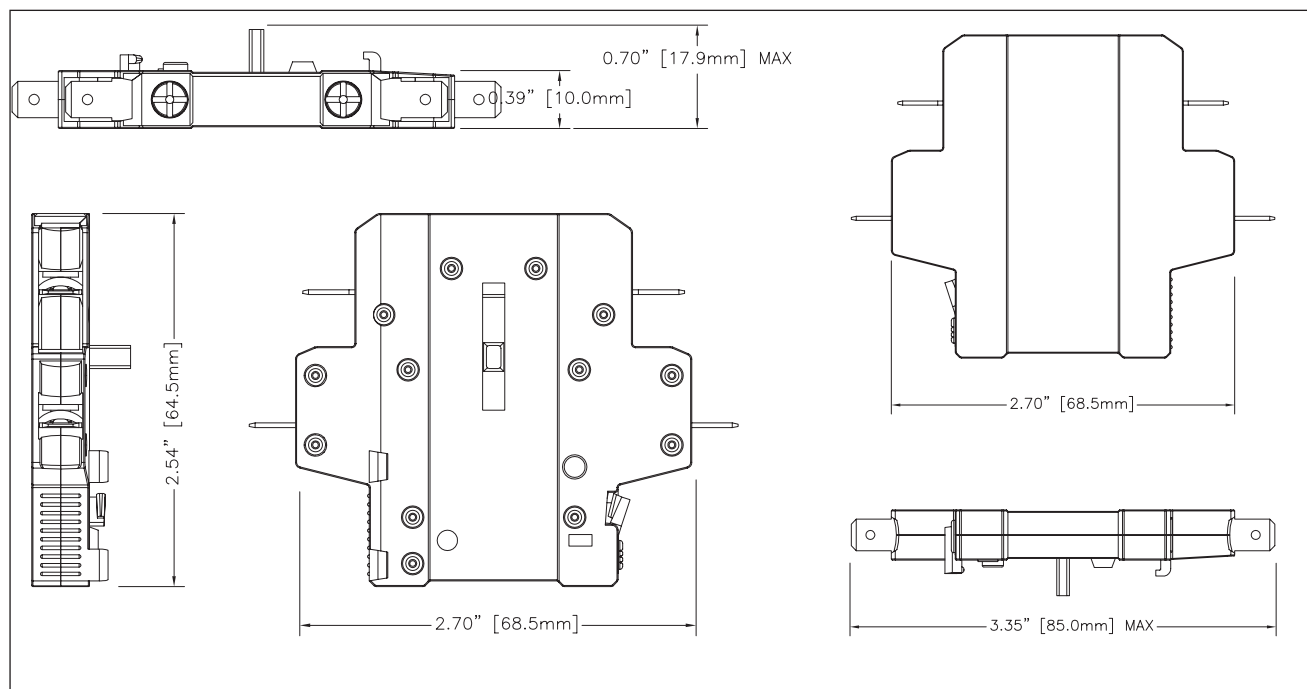


Dimensions (in [mm])

WDPAXFC11 Accessory



WDPAXFC11Q Accessory

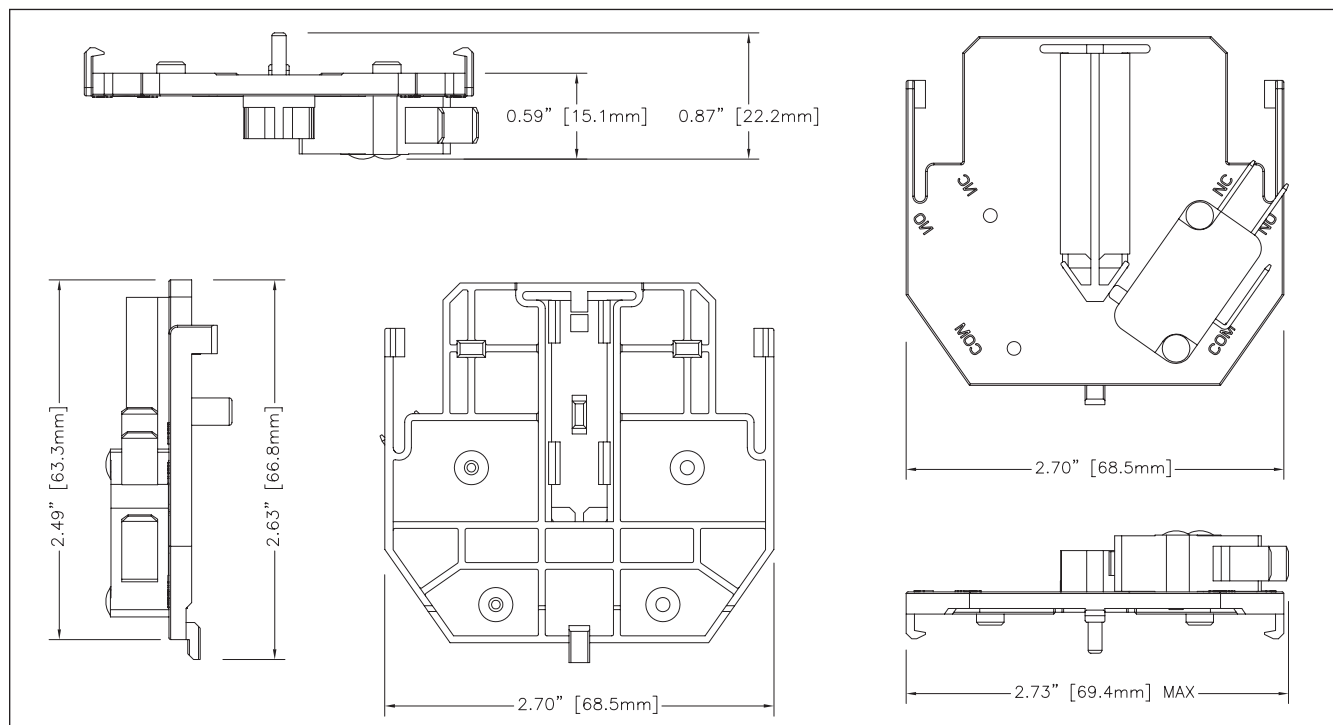


WDP Series Definite Purpose Contactors Accessories



Dimensions (in [mm])

WDPAXFD11 Accessory



WDPAXFD22 Accessory

