PowerMod®

Three Row - Female

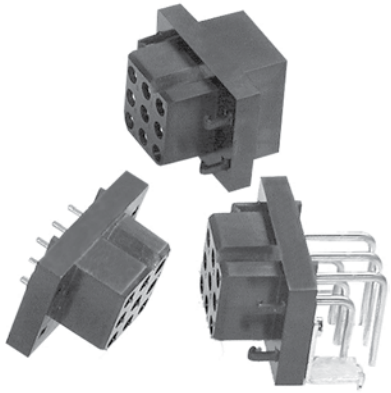
The PowerMod® connector family offers minimum size and high power. The high performance contacts and insulator are rated for 30 amps continuous. Applications requiring lower operating temperatures can be de-rated using our current-temperature chart.

The three row female PowerMod connectors are offered in 9, 12, 18, 24 and 30 circuit sizes. The connectors are available with straight crimp, straight PCB or right angle PCB contacts.

APP connectors are manufactured using the finest materials and world-class manufacturing processes. They embody the highest quality in the industry and meet all applicable industry standards.

FEATURES

- **High performance contacts**
  Rated to 30 amps per IEC 512-3
- **Mechanically polarized housings**
  Only mate one-way, ensuring proper mating
- **High reliability positive retention latches**
  Are made from stainless steel to provide optimum performance
- **PCB, panel or cable mounting**
  A wide variety of contact styles with optional mounting brackets, panel clips and back-shell hoods provide broad design flexibility



SPECIFICATIONS

Electrical	
Current Rating	
IEC 512-3, UL 1977 (Amperes)	30
UL / CSA Voltage Rating (AC/DC)	600
Creepage / Clearance Distance	3.2 mm (.125") Min
Contact Resistance per IEC 512-2	3 milliohms
Dielectric Withstanding Voltage (AC)	2,200
Contact Wire Range (AWG)	#24 to #12
(mm²) *	0.25 to 4.0
Operating Temperature (°C)	-55° to 180°
(°F)	-67° to 356°

Mechanical	
Mating Cycles No Load per IEC 512-5	1,000
Mating / Unmating Force per IEC 512-13	10 oz (3N) avg.
Contact Retention per IEC 512-8	18 lb (80N) Crimp
	9 lb (40N) PCB Connector

Materials	
Insulator	PPS UL94 V-0, material group IIIa
Socket Body	Copper alloy, 200 µ inch Sn Bright over Ni
Socket Contact	BeCu, 30 µ inch Au over Ni
Retention Clips	Stainless steel
Hoods	PBT UL94 V-0

RoHS COMPLIANT APP

c UL us File No. E26226

** Stranding, IEC class 5 or lower*

ORDERING INFORMATION

PowerMod Part Number Plan - Three Row Female

Series	Rows	# Poles	Gender	Contact	Latch	Mounting	Customized Connector
P M	3	0 9	F	B A	L	C H	- X X X

3

09, 12, 18, 24, 30 Poles

F - Female

OO - None (Crimp contacts ordered separately)
BA - Straight PCB Solder Standard Length-RoHS
RA - R/A PCB Solder Standard Length-RoHS

L - Connector with latch (standard for contact type OO)
O - No latch

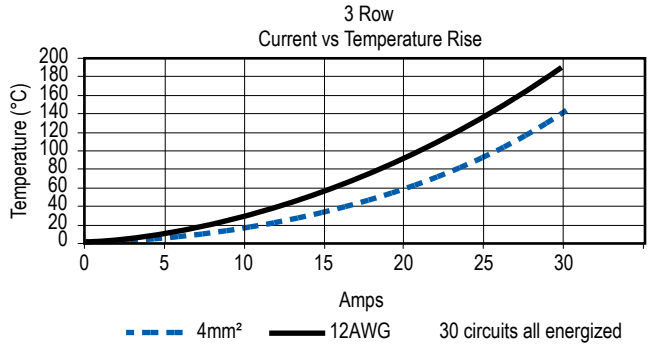
OO - None
SB - R/A PCB Snap Bracket
HB - R/A PCB Bracket with Hole
ST - Self-tapping screws for straight PCB mount
SP - Push in fastener for straight PCB mount
CH - With clam-shell hood
PC - Panel Clip
MC - Mounting Clip
SC - Screw for 1.6mm panel mount

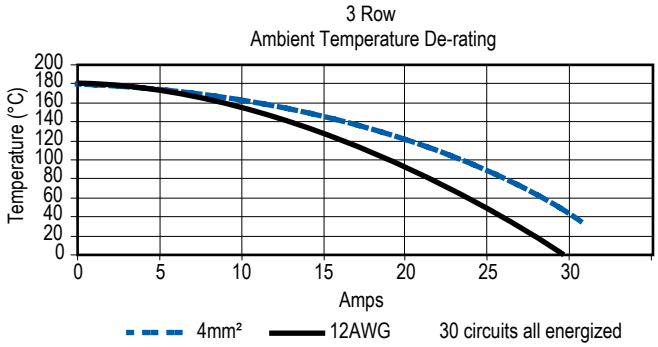
Consult factory for options

Tooling

Part Number	Mil-Standard	Description
TM0001	M22520/1-01	AF8 hand tool
TP0001	N/A	WA27F pneumatic crimp tool
Turret & Locator for TM0001 & TP0001		
TL0001	N/A	For pin contacts
TL0002	N/A	For socket contacts
PM1000G1	N/A	Four indent hand tool with locator
PM1002G1	N/A	Contact insertion tool
PM1003G1	N/A	Contact extraction tool

TEMPERATURE RISE CHARTS

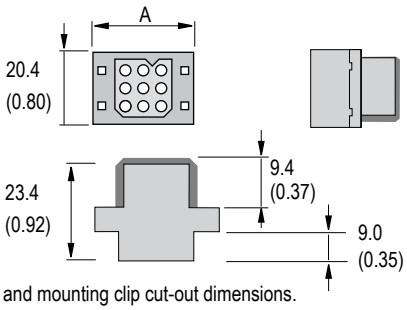




DIMENSIONS - mm(in.)

Cable Connector

ROWS CONTACTS	A mm	A in.
3 - 09	28.5	1.12
3 - 12	33.5	1.32
3 - 18	43.5	1.71
3 - 24	53.5	2.11
3 - 30	63.5	2.50



See accessory section for panel clip and mounting clip cut-out dimensions.

ORDERING INFORMATION

Cable Connector

Part Number	Description
PM309FOOLOO	3x3 FEMALE Cable Connector
PM312FOOLOO	3x4 FEMALE Cable Connector
PM318FOOLOO	3x6 FEMALE Cable Connector
PM324FOOLOO	3x8 FEMALE Cable Connector
PM330FOOLOO	3x10 FEMALE Cable Connector

Panel Mount With Mounting Clip

Part Number	Description
PM309FOOLMC	3x3 FEMALE Cable Connector
PM312FOOLMC	3x4 FEMALE Cable Connector
PM318FOOLMC	3x6 FEMALE Cable Connector
PM324FOOLMC	3x8 FEMALE Cable Connector
PM330FOOLMC	3x10 FEMALE Cable Connector

With Clam Shell Hood & Strain Relief

Part Number	Description
PM309FOOLCH	3x3 FEMALE Cable Connector
PM312FOOLCH	3x4 FEMALE Cable Connector
PM318FOOLCH	3x6 FEMALE Cable Connector
PM324FOOLCH	3x8 FEMALE Cable Connector
PM330FOOLCH	3x10 FEMALE Cable Connector

Panel Mount With Screws

Part Number	Description
PM309FOOLSC	3x3 FEMALE Cable Connector
PM312FOOLSC	3x4 FEMALE Cable Connector
PM318FOOLSC	3x6 FEMALE Cable Connector
PM324FOOLSC	3x8 FEMALE Cable Connector
PM330FOOLSC	3x10 FEMALE Cable Connector

With Snap-in Panel Clip

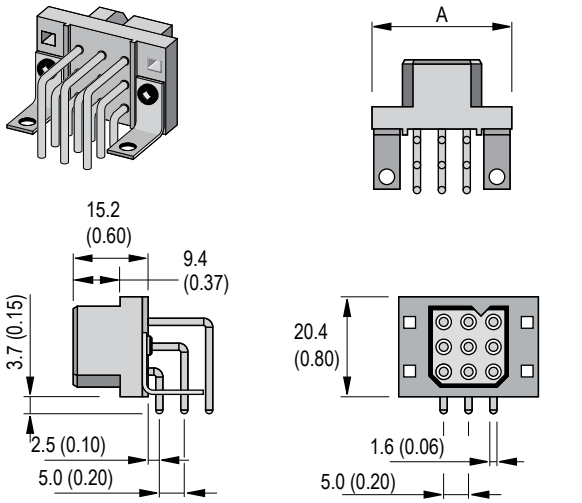
Part Number	Description
PM309FOOLPC	3x3 FEMALE Cable Connector
PM312FOOLPC	3x4 FEMALE Cable Connector
PM318FOOLPC	3x6 FEMALE Cable Connector
PM324FOOLPC	3x8 FEMALE Cable Connector
PM330FOOLPC	3x10 FEMALE Cable Connector

Crimp Contacts

Part Number	Description	Wire AWG	Wire sq. mm
PM16S2024S32	Socket	#24 / 20	0.50 / 0.75
PM16S1620S32	Socket	#20 / 16	0.50 / 1.5
PM16S1416S32	Socket	#16 / 14	1.5 / 2.5
PM16S12S32	Socket	#12	2.5 / 4.0

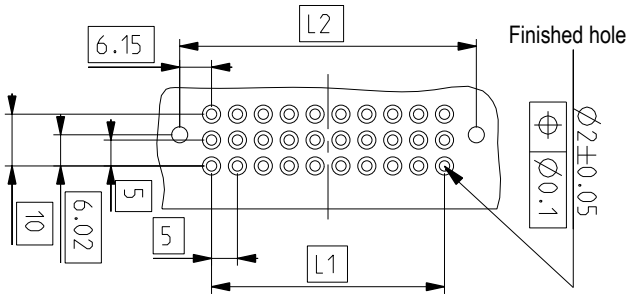
DIMENSIONS - mm(in.)

3 Row - PCB Right Angle Connector



3 Row - PCB Hole Layout For Right Angle Connector

ROWS CONTACTS	A mm	A in.	L1 mm	L1 in.	L2 mm	L2 in.
3 - 09	28.5	1.12	10	0.39	22.3	0.88
3 - 12	33.5	1.32	15	0.59	27.3	1.07
3 - 18	43.5	1.71	25	0.98	37.3	1.47
3 - 24	53.5	2.11	35	1.38	47.3	1.86
3 - 30	63.5	2.50	45	1.77	57.3	2.26



ORDERING INFORMATION

With Latch

Part Number	Description
PM309FRALOO	3x3 FEMALE Right Angle PCB Solder
PM312FRALOO	3x4 FEMALE Right Angle PCB Solder
PM318FRALOO	3x6 FEMALE Right Angle PCB Solder
PM324FRALOO	3x8 FEMALE Right Angle PCB Solder
PM330FRALOO	3x10 FEMALE Right Angle PCB Solder

No Latch

Part Number	Description
PM309FRAOOO	3x3 FEMALE Right Angle PCB Solder
PM312FRAOOO	3x4 FEMALE Right Angle PCB Solder
PM318FRAOOO	3x6 FEMALE Right Angle PCB Solder
PM324FRAOOO	3x8 FEMALE Right Angle PCB Solder
PM330FRAOOO	3x10 FEMALE Right Angle PCB Solder

Right Angle PCB Snap Bracket & Latch

Part Number	Description
PM309FRALSB	3x3 FEMALE Right Angle PCB Solder
PM312FRALSB	3x4 FEMALE Right Angle PCB Solder
PM318FRALSB	3x6 FEMALE Right Angle PCB Solder
PM324FRALSB	3x8 FEMALE Right Angle PCB Solder
PM330FRALSB	3x10 FEMALE Right Angle PCB Solder

Right Angle PCB Snap Bracket & No Latch

Part Number	Description
PM309FRAOSB	3x3 FEMALE Right Angle PCB Solder
PM312FRAOSB	3x4 FEMALE Right Angle PCB Solder
PM318FRAOSB	3x6 FEMALE Right Angle PCB Solder
PM324FRAOSB	3x8 FEMALE Right Angle PCB Solder
PM330FRAOSB	3x10 FEMALE Right Angle PCB Solder

Right Angle PCB Bracket With Hole & Latch

Part Number	Description
PM309FRALHB	3x3 FEMALE Right Angle PCB Solder
PM312FRALHB	3x4 FEMALE Right Angle PCB Solder
PM318FRALHB	3x6 FEMALE Right Angle PCB Solder
PM324FRALHB	3x8 FEMALE Right Angle PCB Solder
PM330FRALHB	3x10 FEMALE Right Angle PCB Solder

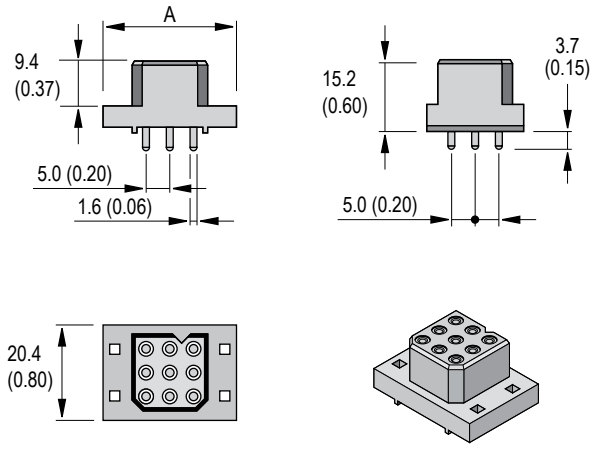
Right Angle PCB Bracket With Hole & No Latch

Part Number	Description
PM309FRAOHB	3x3 FEMALE Right Angle PCB Solder
PM312FRAOHB	3x4 FEMALE Right Angle PCB Solder
PM318FRAOHB	3x6 FEMALE Right Angle PCB Solder
PM324FRAOHB	3x8 FEMALE Right Angle PCB Solder
PM330FRAOHB	3x10 FEMALE Right Angle PCB Solder

PCB contacts and mounting accessories are designed for a board thickness of 1.60mm (.063) with a contact protrusion of 2.10 (.083).
Other contact lengths are available upon request.

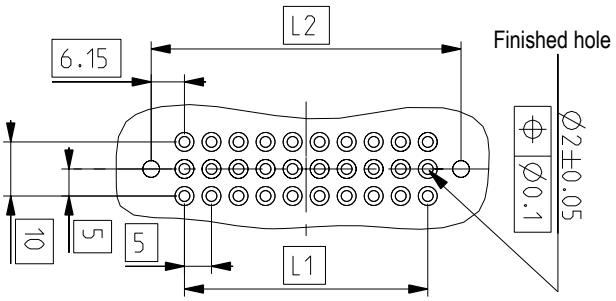
DIMENSIONS - mm(in.)

3 Row - PCB Straight Solder Connector



3 Row - PCB Hole Layout For Sraight Solder Connector

ROWS CONTACTS	A mm	A in.	L1 mm	L1 in.	L2 mm	L2 in.
3 - 09	28.5	1.12	10	0.39	22.3	0.88
3 - 12	33.5	1.32	15	0.59	27.3	1.07
3 - 18	43.5	1.71	25	0.98	37.3	1.47
3 - 24	53.5	2.11	35	1.38	47.3	1.86
3 - 30	63.5	2.50	45	1.77	57.3	2.26



ORDERING INFORMATION

With Latch

Part Number	Description
PM309FBALOO	3x3 FEMALE Straight PCB Solder
PM312FBALOO	3x4 FEMALE Straight PCB Solder
PM318FBALOO	3x6 FEMALE Straight PCB Solder
PM324FBALOO	3x8 FEMALE Straight PCB Solder
PM330FBALOO	3x10 FEMALE Straight PCB Solder

No Latch

Part Number	Description
PM309FBAOOO	3x3 FEMALE Straight PCB Solder
PM312FBAOOO	3x4 FEMALE Straight PCB Solder
PM318FBAOOO	3x6 FEMALE Straight PCB Solder
PM324FBAOOO	3x8 FEMALE Straight PCB Solder
PM330FBAOOO	3x10 FEMALE Straight PCB Solder

Push On PCB Fastener & Latch

Part Number	Description
PM309FBALSP	3x3 FEMALE Straight PCB Solder
PM312FBALSP	3x4 FEMALE Straight PCB Solder
PM318FBALSP	3x6 FEMALE Straight PCB Solder
PM324FBALSP	3x8 FEMALE Straight PCB Solder
PM330FBALSP	3x10 FEMALE Straight PCB Solder

Push On PCB Fastener & No Latch

Part Number	Description
PM309FBAOSP	3x3 FEMALE Straight PCB Solder
PM312FBAOSP	3x4 FEMALE Straight PCB Solder
PM318FBAOSP	3x6 FEMALE Straight PCB Solder
PM324FBAOSP	3x8 FEMALE Straight PCB Solder
PM330FBAOSP	3x10 FEMALE Straight PCB Solder

Self-tapping Screws For PCB Mount & Latch

Part Number	Description
PM309FBALST	3x3 FEMALE Straight PCB Solder
PM312FBALST	3x4 FEMALE Straight PCB Solder
PM318FBALST	3x6 FEMALE Straight PCB Solder
PM324FBALST	3x8 FEMALE Straight PCB Solder
PM330FBALST	3x10 FEMALE Straight PCB Solder

Self-tapping Screws For PCB Mount & No Latch

Part Number	Description
PM309FBAOST	3x3 FEMALE Straight PCB Solder
PM312FBAOST	3x4 FEMALE Straight PCB Solder
PM318FBAOST	3x6 FEMALE Straight PCB Solder
PM324FBAOST	3x8 FEMALE Straight PCB Solder
PM330FBAOST	3x10 FEMALE Straight PCB Solder

PCB contacts and mounting accessories are designed for a board thickness of 1.60mm (.063) with a contact protrusion of 2.10 (.083).
Other contact lengths are available upon request.

HEADQUARTERS: Anderson Power Products®, 13 Pratts Junction Road, Sterling, MA 01564-2305 USA T:978-422-3600 F:978-422-0128
EUROPE: Anderson Power Products® Ltd., Unit 3, Europa Court, Europa Boulevard, Westbrook, Warrington, Cheshire, WA5 7TN United Kingdom T: +44 (0) 1925 428390 F: +44 (0) 1925 520203
ASIA / PACIFIC: IDEAL Anderson Asia Pacific Ltd., Unit 922-928 Topsail Plaza, 11 On Sum Street, Shatin N.T., Hong Kong T:+(852) 2636 0836 F:+(852) 2635 9036
CHINA: IDEAL Anderson Technologies (Shenzhen) Ltd., Block A8 Tantou Western Industrial Park, Songgang Baoan District, Shenzhen, PR. China 518105 T: +(86) 755 2768 2118 F: +(86) 755 2768 2218
TAIWAN: IDEAL Anderson Asia Pacific Ltd., Taiwan Branch, 4F.-2, No.116, Dadun 20th St., Situn District, Taichung City 407, Taiwan (R.O.C.) T: +(886) 4 2310 6451 F:+(886) 4 2310 6460
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