

# MPC SERIES

HPC, HHPC & HMPC have been grouped together in MPC series.  
MPC are known as CMR & HMPC are known as HDR.



## TECHNICAL SPECIFICATIONS

TYPE		MPC			
TERMINAL TYPE		Plug In			
CONTACT CONFIGURATION		2C / 3C			2C
RATED CARRYING CURRENT (RESISTIVE) AT 24 VDC / 250 VAC & 220VDC*		5A <sup>#</sup>	10A <sup>#</sup>	12A	16A
CONTACT MATERIAL		Silver alloy			
INITIAL CONTACT RESISTANCE		0.050 Ω			
COIL NOMINAL VOLTAGES	DC	6-250 V			
	AC	6-415 V @ 50 Hz / 60 Hz*			
OPERATING POWER (MIN-MAX) FOR DC COIL		0.72 - 1.25 W		1.20 - 1.25 W	
OPERATING POWER (MIN-MAX) FOR AC COIL		2.02 - 2.43 VA		2.42 - 3.60 VA	
DIELECTRIC STRENGTH BETWEEN	OPEN CONTACT	1500 V <sub>RMS</sub>		1800 V <sub>RMS</sub>	
	COIL TO CONTACT	2000 V <sub>RMS</sub>			
INSULATION RESISTANCE AT 500 VDC AT 27°C & 65% RH		500 MΩ			
OPERATE TIME (MAX)		20 ms			
RELEASE TIME (MAX)		10 ms			
RELEASE TIME WITH DIODE (Max)		20 ms			
AMBIENT TEMPERATURE		-25°C To +55°C			
IMPULSE WITHSTAND VOLTAGE (AS PER IEC 60255-5)		5kV 1.2/50 μS.			
ELECTRICAL LIFE (NO. OF OPERATIONS)		10 <sup>5</sup>			
MECHANICAL LIFE (NO. OF OPERATIONS)		10 <sup>7</sup>			
ALL DIMENSIONS ARE IN MM (W X L X H) APPROX.		37.6 x 37.6 x 68			
MAX WEIGHT IN GRAMS (APPROX.)		75 gms			
INBUILT FEATURE		LED			
OPTIONAL FEATURES		DIODE			
STANDARDS		IEC 61810-1, IEC 60255-5 meeting as per JSS 50711 and JSS 50101			



(Photo For Representation Purpose Only)



## SALIENT FEATURES

- High Reliability
- Elegant / Sturdy and Light weight
- ARC Suppressor\*(HMPC)
- Dust Protected
- Excellent Isolation
- Medium Power Sources
- Compact High Performance
- Din Rail Socket Available

## APPLICATIONS

- |                           |  |                                  |
|---------------------------|--|----------------------------------|
| • Machine Tools           | • Bio-medical Instruments & Appliances | • Inverters                      |
| • Control Panels          | • Uninterrupted Power Supplies         | • Industrial controls            |
| • Temperature controllers | • Process Control Systems              | • Circuit Breakers               |
| • Stabilizers             | • Electrical Equipment's Appliances    | • High voltage DC Panels/ Motors |
| • Textile Machines        | • Automation & Remote Control Systems  | • Scada Applications             |
| • Battery Chargers        |  |                                  |

**NOTE :-** 1) This product is type tested by TUV Nord as per IEC 61810-1:2015-A1:2019

2) Recommended socket :- For MPC 2C is MPSC 8, For MPC 3C is MPSC 11

3) All Specification / Dimensions subject to Tolerance

4) Gold plated contacts available with extra charges

5) \*Relay with Arc suppressor (HMPC & HHPC) Available in 5A / 10A / 12A / 16A @220VDC with 2 Changeover (2C) contact

6) \*Special Relay With 60Hz Compatibility Available At Extra Charge.

7) MPC series are also known as CMR (Contact multiplying relays) with rated carrying current resistive at 24VDC/250VAC. HMPC are HDR (Heavy duty relays) with rated carrying current resistive at 220VDC/250VAC

8) Any techno commercial changes is / are prerogative of manufacturer / management of the company which can be done without any notice



+91 9152626104



+91 7045459530



sales@plarelays.com



www.plarelays.com

1

## COIL – DATA (5A / 10A) (MPC / HMPC) (ALL VALUES AT 27°C ± 2°AMBIENT, COLD START)

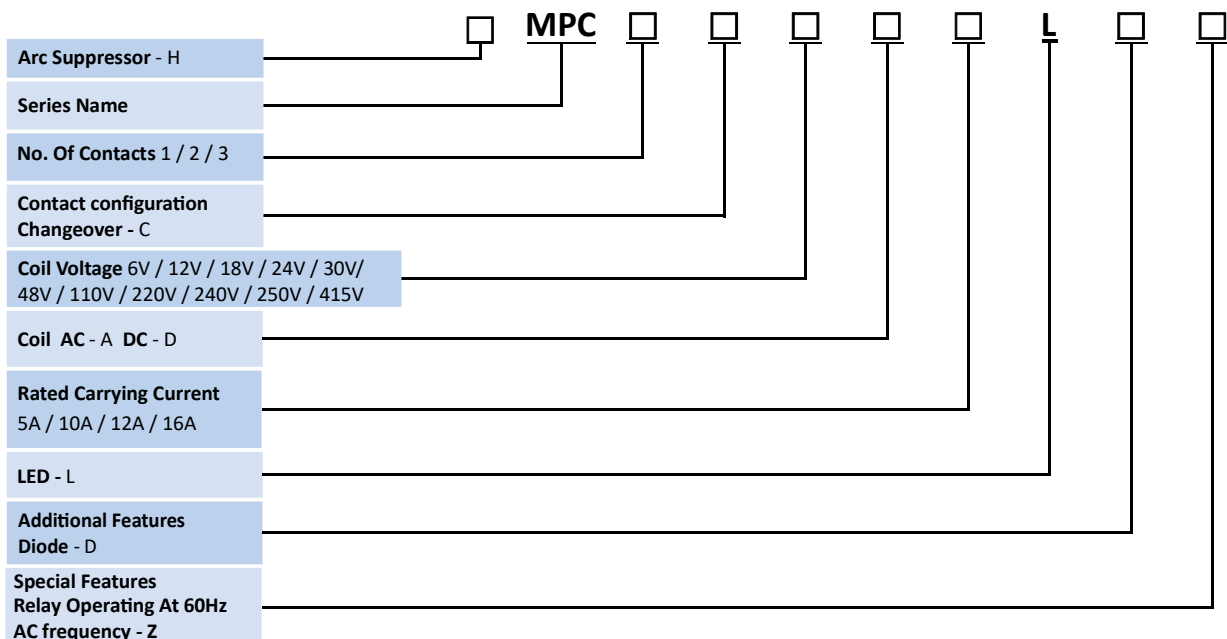
NOMINAL VOLTAGE (V)	RESISTANCE IN OHM'S ± 10%		MUST OPERATE VOLTAGE (V)	MUST RELEASE VOLTAGE (V)	OPERATING POWER FOR COIL	
	DC RELAY	AC RELAY			DC (W)	AC (VA)
6	30	7	4.8	0.6	1.20	2.06
12	1C	200	30	9.6	1.2	1.92
	2C	200	30	9.6	1.2	1.92
	3C	150	30	9.6	1.2	1.92
18	390	-	14.4	1.8	0.83	-
24	500	110	19.2	2.4	1.15	2.09
30	750	-	24	3.0	1.2	-
48	2.25k	440	38.4	4.8	1.02	2.09
110	10k	2.4k	88	11	1.21	2.02
220	50k	-	176	22	1.21	-
240	-	9.5k	192	24	-	2.43
250	50k	-	200	25	1.25	-
415	-	27k	332	41.5	-	2.55

## HMPC & HHPC Relay Available (MPC with Arc Suppressor)

## COIL – DATA (12A / 16A) (HPC) (ALL VALUES AT 27°C ± 2°AMBIENT, COLD START)

NOMINAL VOLTAGE (V)	RESISTANCE IN OHM'S ± 10%		MUST OPERATE VOLTAGE (V)	MUST RELEASE VOLTAGE (V)	OPERATING POWER FOR COIL	
	DC RELAY	AC RELAY			DC (W)	AC (VA)
6	30	4	4.8	0.6	1.20	3.60
12	120	16	9.6	1.2	1.20	3.60
18	270	-	14.4	1.8	1.20	-
24	480	110	19.2	2.4	1.20	3.29
30	750	-	24	3.0	1.2	-
48	1.9k	-	38.4	4.8	1.21	-
110	10k	2.4k	88	11	1.21	2.42
220	40k	-	176	22	1.21	-
240	-	9.5k	192	24	-	2.43
250	45k	-	200	25	1.38	-
415	-	27k	332	41.5	-	2.55

## ORDERING CODE FOR RELAY



+91 9152626104



+91 7045459530

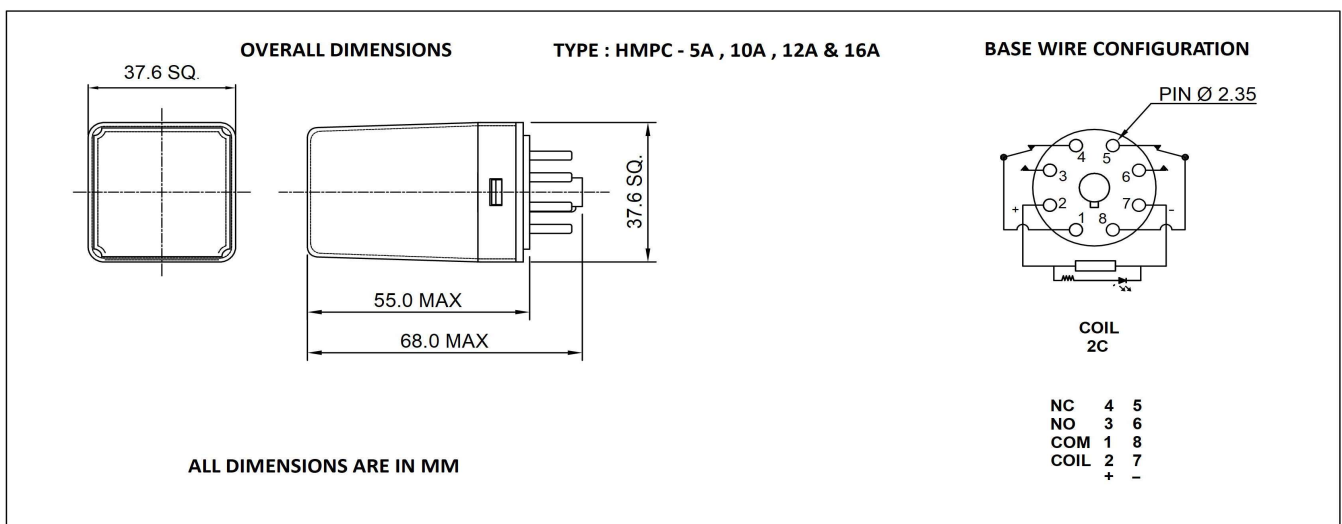
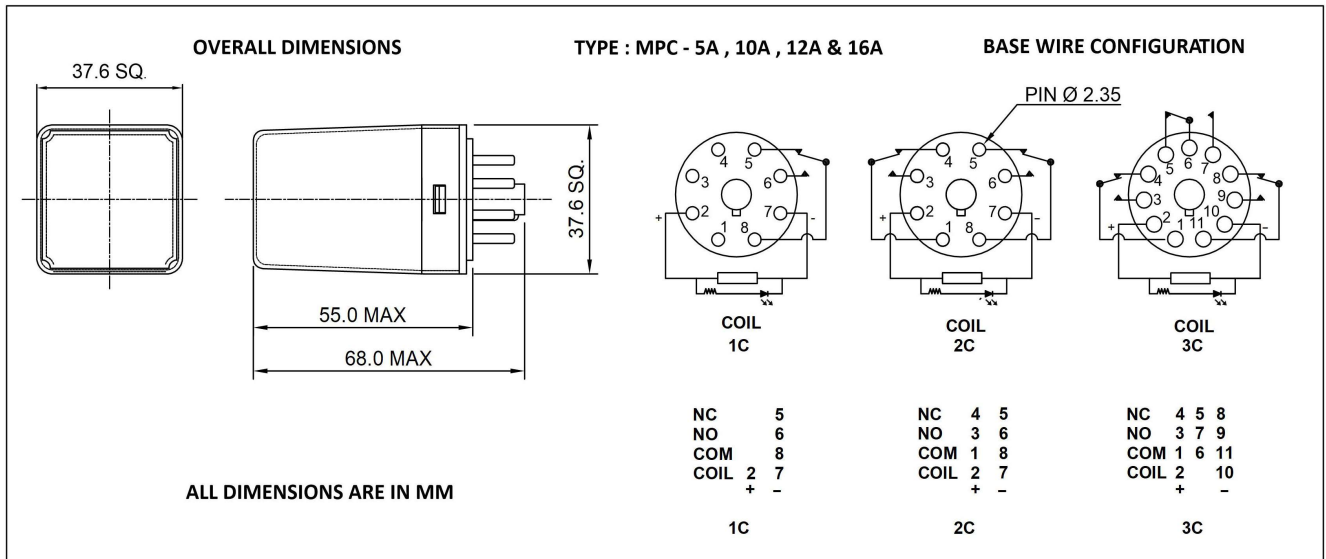


sales@plarelays.com



www.plarelays.com

## OVERALL DIMENSIONS



**NOTE :-** 1) In case no tolerance shown in outline dimensions : Outline dimension 1mm, tolerance should be  $\pm 0.2\text{mm}$   
Outline dimension 1mm and 5mm, tolerance should be  $\pm 0.3\text{mm}$  Outline dimension 5mm tolerance should be  $\pm 0.4\text{mm}$   
2) The tolerance without indicating for PCB layout is always  $\pm 0.2\text{mm}$



+91 9152626104



+91 7045459530



sales@plarelays.com



www.plarelays.com

3