



**DC Contact Rating - P600**

Volts	Amperes		Volt Amperes <sup>2</sup>		Continuous Amperes
	Make	Break	Make	Break	
125	1.1	1.1	138	138	5
250	0.55	0.55	138	138	5
600	0.20	0.20	138 <sup>2</sup>	138 <sup>2</sup>	5

<sup>2</sup> 300 Volts or Less

All relays require a minimum of 7/8 in. clearance below magnet for coil change.  
 A horizontal space of 1/8 in. between relays is recommended.

**Mounting Holes For #10 Screws**

Relay Type	Open Relay Cat. Number	H	W	D	Hm	Wm
PM-DC	4U2,4U3,4U4	6 1/8	3	3 1/4	4 1/2	2
	4U6,4U8	6 1/8	4 1/2	3 1/4	4 1/2	2
PML-DC	5UHD2	5 5/16	3	3 5/8	4 1/2	2
	5UHD3, 5UHD4	5 5/16	4 1/2	3 5/8	4 1/2	2
PMT-DC	714UP	6 1/8	3	3 1/8	4 1/2	2 1/2
	713UP-DC 1,2-Pole	5 1/2	3	3 3/8	4 1/2	2
	713UP-DC 3 Pole	5 1/2	3 3/4	3 3/8	4 1/2	2
	713UP-DC 4 Pole	5 1/2	4 1/2	3 3/8	4 1/2	2

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Standard catalog listed AC relays ordered will have the proper coils as determined by the voltage and frequency suffix to the catalog number. Changing the circuit arrangement on a relay also changes the mechanical load on the magnet and may require a change of operating coil to assure proper operation. The information on this page will enable you to select the correct operating coil for any circuit arrangement required. Voltage-ampere requirements are provided to help in designing your panels. To select the proper operating coil for all

basic and latch relays except the Slim Jim, first determine the mechanical load on the magnet simply by totalling the load represented by the individual components operated by the magnet, using the mechanical load factors shown below. Select the proper coil from Table 1. When selecting the proper coil for Slim Jim Relays and Time Delay Relays, it is not necessary to determine the mechanical load

factor. As shown in Table 1, one coil for each voltage and frequency will operate all pole combinations.

**For Example:**

Table 1 indicates that the proper coil number for 110 volts, 60 hertz application is TB113-61, since the load factor of 168 falls within the Mechanical Load Range of 145 to 192.

**Mechanical Load Factors:**

Convertible Pole - Normally Open .....	10
Convertible Pole - Normally Closed .....	12
Double Contact Pole - Universal or Duplex .....	36
Latch Mechanism .....	20

**Example:**

A relay with 1 N.O. and 9 N.C. convertible poles and a latch mechanism will have a mechanical

load factor as follows:

1 N.O. Convertible Pole .....	10
9 N.C. Convertible Poles .....	108
Accumulation Factor <sup>1</sup> .....	30
1 Latch Mechanism .....	20
<b>Total Mechanical Load Factor .....</b>	<b>168</b>

**Coil Application Tables - Type PM Relay Family**

**Table 1**

AC Volts	Hertz	Basic And Latch Relays				Slim Jim Relays All Pole Combinations	Trip Coil on Latch Relays, All Pole Combinations	Time Delay Relays
		Mechanical Load Range (Does Not Apply To Slim Jim Relays)						Class A All Pole Combinations
		20-72	73-144	145-192	193-240			
Coil Catalog Numbers - Bulletin 7303 & 7305 PM & PML								
24	60	TB113-36	TB113-37	TB113-60	---	TB139-10	TB127-14	TB135-16
110-120	60	TB113-1	TB113-3	TB113-61	TB130-13	TB139-1	TB127-20	TB135-1
	110							
110	25	TB113-20	TB113-20	---	---	---	TB127-23	TB135-14
220-240	60	TB113-4	TB113-6	TB113-62	TB130-14	TB139-2	TB127-21	TB135-2
	220							
220	25	TB113-8	TB113-8	---	---	---	TB127-5	TB135-15
380	60	TB113-65	TB113-64	TB113-63	TB130-3	TB139-3	TB127-3	TB135-3
	50	TB113-7	TB113-28	TB113-64	TB130-9	TB139-4	TB127-4	TB135-9
	25	TB113-22	TB113-22	---	---	---	TB127-12	---
440-480	60	TB113-7	TB113-9	TB113-64	TB130-9	TB139-4	TB127-11	TB135-4
	440							
440	25	TB113-33	TB11-33	---	---	---	---	TB135-17
550-600	60	TB113-16	TB113-11	TB113-66	TB130-6	TB139-6	TB127-6	TB135-6
	550							
550	25	TB113-34	TB113-34	---	---	---	---	---
<b>Volt -Amperes</b>								
INRUSH	60	67	108	141	161	61	16	215
SEALED		23	36	47	53	16	8	35
INRUSH	50	51	93	124	180	51	Refer to Sales Office	180
SEALED		18	33	45	49	13	30	
INRUSH		39	50	---	---	---	Refer to Sales Office	70
SEALED		15	22	---	---	---	15	

<sup>1</sup> For relays with 9 or more normally closed convertible poles, an accumulation factor of 30 must be added to the total mechanical load factor for the relay

