

ZCPR Series

MOTOR START POTENTIAL RELAY

FEATURES

- 50A switching capability
- SPST-NC configurations
- .250" quick connect termination
- ISO 9001 certified
- Variety of mounting positions
- UL, CUR SA11095
- Non-position sensitive design*



ZCPRA6AM6

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 7.5 x 10 ⁵ 5 x 10 ⁵ at 16A 400VAC 2 x 10 ⁵ at 35A 400VAC (break only) 1 x 10 ⁵ at 50A 400VAC (break only)
Dimensions (mm)	51.2 x 46.6 x 36.5
Construction	Unsealed
Weight	approx. 110 grams
Ambient Operating Temp.	-20°C to 40°C

COIL

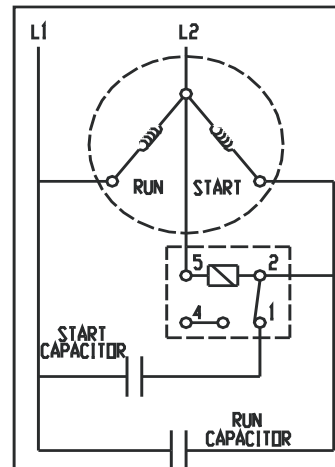
Coil Consumption	5VA
Coil Voltage	See table A & B
Coil Resistance	See table A & B
Insulation System	Class B (130°C)

CONTACTS

Arrangement	SPST-NC
Ratings	16A (make and break), 400 VAC, cos ϕ = 0.7 to 0.8 35A (break only), 400 VAC cos ϕ = 0.7 to 0.8 50A (break only), 400 VAC cos ϕ = 0.7 to 0.8
Material	Silver cadmium oxide
Resistance	< 50 milliohms at 1A 24VDC

*Except in position #3

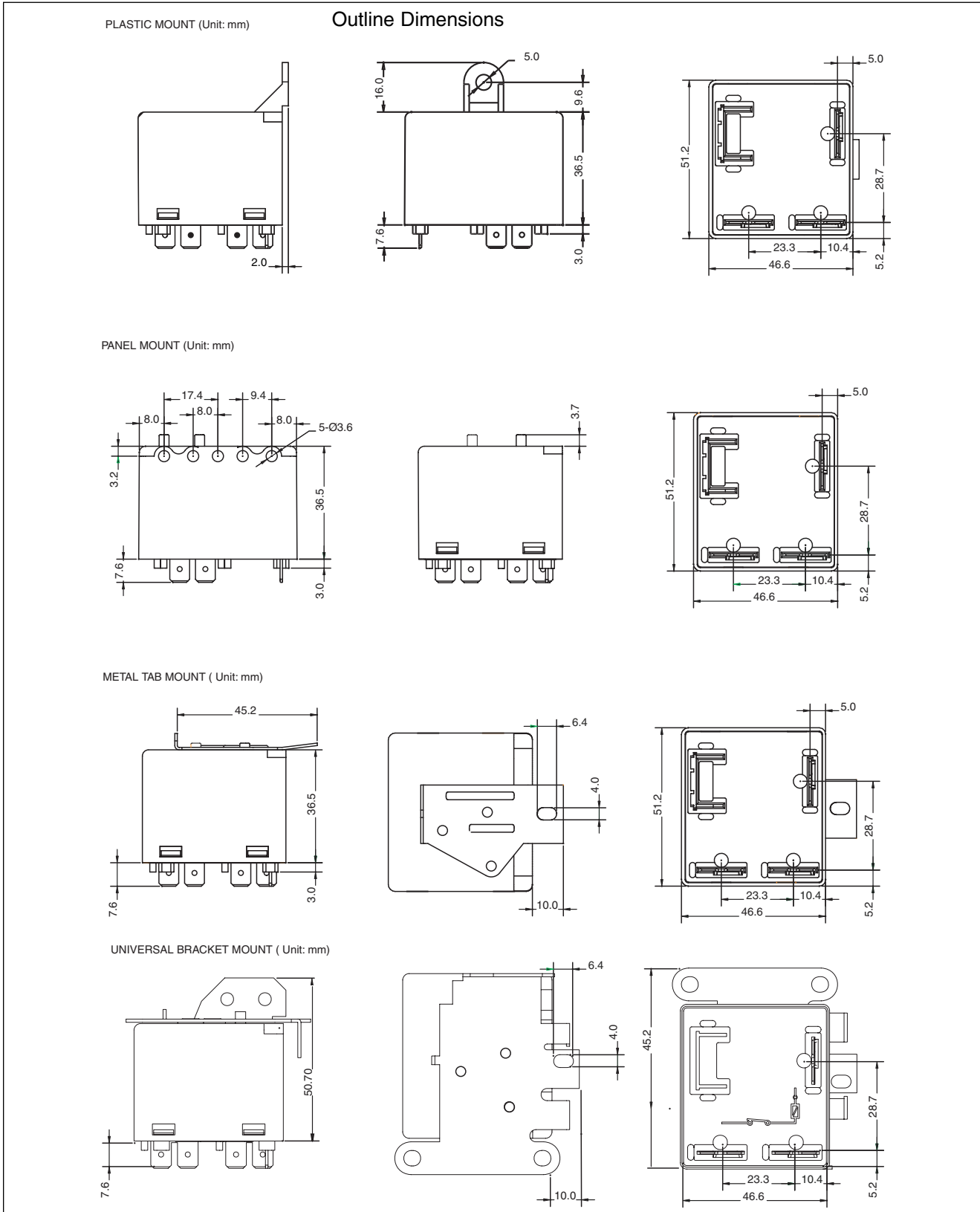
WIRING DIAGRAM



ZCPR Series

MECHANICAL DATA

TAB MOUNT ZCPRZ6AM6 Shown



AMERICAN ZETTLER, INC.

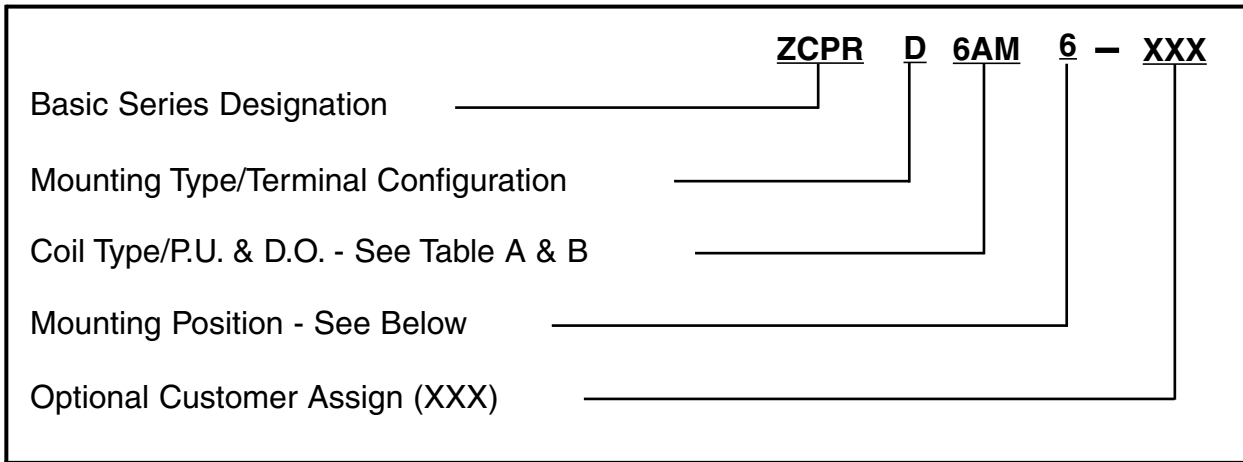
www.azettler.com

75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.CO 1/22/13

ZCPR Series

MOTOR START POTENTIAL RELAY

PART NUMBERING SYSTEM



Part number ordering information.

MOUNTING TYPE/TERMINAL CONFIGURATION

B	Plastic Tab and Panel Mount, 5 dual QD (2 on #4)
D	Plastic Tab and Panel Mount, 3 dual QD (#1, 2, and 5)
M	Panel Mount, 5 dual QD (2 on #4)
P	Panel Mount, 3 dual QD (#1, 2, and 5)
U	Universal Metal Bracket Mount, 5 dual QD (2 on #4)
X	Metal Tab Mount, 5 dual QD (2 on #4)
Z	Metal Tab Mount, 3 dual QD (#1, 2, and 5)

*Universal Metal Bracket Mount not available in position 3

MOUNTING POSITION

	1	2	3*	4	5	6
METAL TAB MOUNT						
PANEL MOUNT						
PLASTIC TAB & PANEL MOUNT						

Note: Custom mounting positions available upon request.

* Position sensitive

AMERICAN ZETTLER, INC.

www.azettler.com

75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM

1/22/13

ZCPR Series

MOTOR START POTENTIAL RELAY

TABLE A - OPERATING CHARACTERISTICS AT 50 Hz

Coil number	2			3		4		5		6		7		8		9	
V _{max} at 40° C (V)	299			338		378		356		452		151		530		228	
Resistance ±10% at 25° C (Ω)	5600			7500		10700		10000		13800		1500		19500		3900	
	H.P.U.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.
A	120-130											111-124	20-45			111-124	35-77
B	130-140											120-134	20-45			120-134	35-77
C	150-160	140-153	40-90									130-144	20-45			130-144	35-77
D	160-170	150-163	40-90	150-163	40-90							140-153	20-45			140-153	35-77
E	170-180	162-175	40-90	162-175	40-90											149-163	35-77
F	180-190	171-184	40-90	171-184	40-90			180-195	40-105							157-172	35-77
G	190-200	180-193	40-90	180-195	40-105	180-195	40-105	189-205	40-105							168-182	35-77
H	200-220	186-215	40-90	190-215	40-105	195-224	50-110	186-214	60-133							178-192	35-77
I	220-240	205-234	40-105	208-239	50-110	204-233	50-110	204-233	60-133							183-213	35-77
L	240-260	224-252	40-105	224-252	50-110	223-259	50-110	223-252	60-133	223-252	60-130					203-231	35-77
M	260-280	243-271	40-105	239-270	50-110	242-272	50-110	242-272	60-133	239-268	60-135			239-268	75-170		
N	280-300			260-289	50-110	262-290	60-121	262-290	60-133	258-287	60-135			258-287	75-170		
O	300-320					280-310	60-121	280-310	60-133	277-305	60-135			277-305	75-170		
P	320-340					300-328	60-121	300-328	60-154	295-324	60-135			295-324	75-170		
Q	340-360					318-347	60-121			314-342	60-135			314-342	75-180		
R	350-370													323-352	75-180		
S	360-380													332-361	75-180		

H.P.U. = Approximate pick up at 90° C, P.U. and D.O. values at 25° C.

TABLE B - OPERATING CHARACTERISTICS AT 60 Hz

Coil number	2			3		4		5		6		7		8		9	
V _{max} at 40° C (V)	332			375		420		395		502		168		588		253	
Resistance +10% at 25° C (Ω)	5600			7500		10700		10000		13800		1500		19500		3900	
	H.P.U.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.
AA	120-130											111-124	20-45			111-124	35-77
AB	130-140											120-134	20-45			120-134	35-77
AC	150-160											130-144	20-45			130-144	35-77
AD	160-170	150-163	40-90									140-153	20-45			140-153	35-77
AE	170-180	162-175	40-90									149-163	20-45			149-163	35-77
AF	180-190	171-184	40-90					180-195	40-105							157-172	35-77
AG	190-200	180-193	40-90	180-195	40-105			189-205	40-105							168-182	35-77
AH	200-220	186-215	40-90	190-215	40-105	195-224	60-121	186-214	60-130							178-192	35-77
AI	220-240	205-234	40-90	208-239	50-110	204-233	60-121	204-233	60-130							183-213	35-77
AL	240-260	224-252	40-105	224-252	50-110	223-259	60-121	223-252	60-130							203-231	35-77
AM	260-280	243-271	40-105	239-270	50-110	242-272	60-121	242-272	60-140	239-268	60-135					221-250	35-77
AN	280-300			260-289	50-110	262-290	60-121	262-290	60-140	258-287	60-135			258-287	75-170		
AO	300-320					280-310	60-121	280-310	60-140	277-305	60-135			277-305	75-170		
AP	320-340					300-328	60-121	300-328	60-140	295-324	60-135			295-324	75-170		
AQ	340-360					318-347	60-121			314-342	60-135			314-342	75-180		
AR	350-370													323-352	75-180		
AS	360-380													332-361	75-180		

H.P.U. = Approximate pick up at 90° C, P.U. and D.O. values at 25° C.