



APPLE - TP (AC)SOLID STATE RELAY



GENERAL	
Operating temperature	- 30 deg. C to 80 deg. C
Operating frequency	47 Hz to 63 Hz.
I / O Insulation	2 kV
I / O Isolation base	4 / 6 kV
Weight	@ 250 g
Dimensions (L* B * H)	104 * 73.5 * 21
LED ON indication on request	

SALIENT FEATURES:

- 2 kV ISOLATION,
- LOW INPUT CURRENT,
- ZERO VOLTAGE & RANDOM TURN ON,
- "SNUBBERED" TRIAC OUTPUT,
- TRANSIENT IMMUNITY,
- FASTER SWITCHING RESPONSE,
- NO NOISE FEEDBACK FROM OUTPUT TO INPUT,
- NO NOISE DUE TO LOAD CURRENT SWITCHING AT NEAR ZERO POINT,
- A LONGER LIFETIME DUE TO CONTACTLESS SYSTEM,

TECHNICAL DATA (@ TA = 25°C)

INPUT	4 - 32 V D.C.			24 V A.C.			90 - 240 V A.C.		
	MIN	MAX	UNIT	MIN	MAX	UNIT	MIN	MAX	UNIT
INPUT ON VOLTAGE	4	32	V D.C.	19.2	28.8	V A.C.	90	240	V A.C.
INPUT OFF VOLTAGE	1	1.5	V D.C.	11	12	V A.C.			V A.C.
INPUT CURRENT	8	22	mA	8	22	mA	8	22	mA
INPUT IMPEDANCE	0.22	1.4	K Ω			K Ω		16	K Ω
UTPUT				SYMBOL	ZERO SWITCHING				UNIT
MAX NOMINAL RMS CURRENT				I_T	10	15	25	40	A
LINE VOLTAGE					480	480	480	480	V A.C.
MINIMUM LINE VOLTAGE					24	24	24	24	V A.C.
YNCHRONIZING VOLTAGE					5 - 20	5 - 20	5 - 20	5 - 20	V_{PK}
MAX ON STATE VOLTAGE DROP				V_{TM}	1.6	1.6	1.85	1.85	V_{RMS}
PEAK ONE CYCLE SURGE ON STATE				I_{TSM}	90	125	240	300	A
LEAKAGE CURRENT				I_{DRM}	7 - 10	7 - 10	7 - 10	7 - 10	mA
TURN OFF TIME(MAX FOR ZERO SWITCHING)				T_{OFF}	10	10	10	10	ms
RATE OF RISE OF OFF STATE VOLTAGE				dV / dt	200	200	200	200	V/s
HOLDING CURRENT				I_{HO}	75	75	75	75	mA
FUSING CURRENT				I^2t	72	110	312	450	A ² s
THERMAL RESISTANCE(JUNCTION - CASE)				Θ_{JC}	3.4	2.3	1.5	1.2	° C/W

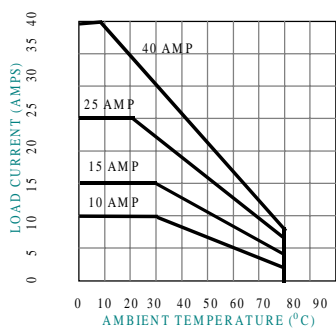
NOTE:

1. Ratings are based on single mounted unit in free air flow for closely packed units. Careful consideration of ambient temperature will be necessary on account of restricted airflow.
2. Use of metal oxide varistor for transient voltage protection, and semi conductor protection is recommended.
3. For load current above 3A, heat sink is to be used. To select heat sink, consult manufacturer.
4. Ensure correct input supply, relay operation may be erratic for inputs between 1-4VDC
5. For ordering information, please refer to the SOLID STATE RELAY SELECTION GUIDE

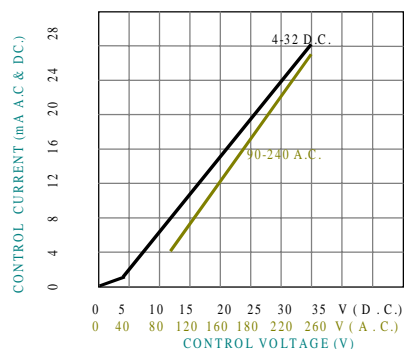
Specifications subjected to change without notice.

INPUT OUTPUT CHARACTERISTIC:

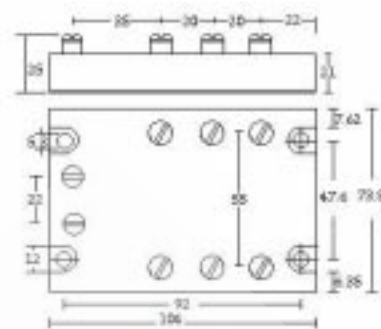
MAX ALLOWABLE CURRENT
VS
AMBIENT TEMPERATURE



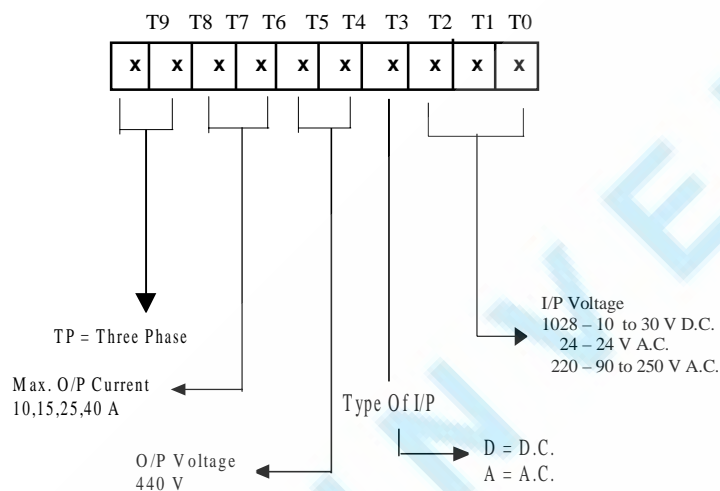
INPUT CURRENT
VS
CONTROL VOLTAGE(TYPICAL)



DIMENSIONAL DIAGRAM:



SELECTION CRITERIA:



e.g. => TP4044A220

TP = Three Phase
 40 = 40 A (Max O/P Current)
 44 = 440 V A.C. O/P
 A = A.C. I/P
 220 = V I/P