AZ755

20 AMP MINIATURE POWER RELAY

FEATURES

- Dielectric strength 5000 Vrms
- Low cost
- Epoxy sealed version available
- 20 Amp switching — single pole contacts
- Isolation spacing greater than 8mm
- UL Class B insulation system standard, Class F available
- UL, CUR file E44211
- TÜV file R50129286

CONTACTS

Arrangement	SPST (1 Form A, 1 Form B) SPDT (1 Form C)
Ratings	Resistive load: Max. switched power: 480 W or 5540 VA Max. switched current: 20 A Max. switched voltage: 150* VDC or 380 VAC *Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Load **UL, CUR**	20 A at 277 VAC N.O. resistive, 50k cycles 16 A at 240 VAC general use, 100k cycles 12 A at 277 VAC N.O. resistive., 100k cycles 20 A at 24 VDC resistive 1 HP 240 VAC TV-8 125 VAC N.O. (silver tin oxide only) Suffix 136 Contact 25 A at 125 VAC N.O. resistive, 30k cycles 20 A at 125/250/277 VAC N.O. general use, 30k cycles 1/2 HP at 125/250 VAC TV-10 at 125 VAC N.O. 10 FLA, 60 LRA at 250 VAC N.O. 20k cycles
TÜV	16 A at 30 VDC, 250 VAC resistive, 30k cycles* 13 A at 420 VAC resistive, 30k cycles * *approval for form A , C, and Class F only
Material	Silver cadmium oxide (silver tin oxide available)
Resistance	< 50 milliohms initially (24 V, 1 A voltage drop method)

COIL

Power	
At Pickup Voltage (typical)	270 mW
Max. Continuous Dissipation	1.9 W at 20°C (68°F) ambient
Temperature Rise	34°C (61°F) at nominal coil voltage
Temperature	Max. 130°C (266°F)

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 1 x 10^7 1 x 10^5 at 16 A 240 VAC Res.
Operate Time (typical)	15 ms at nominal coil voltage
Release Time (typical)	5 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength **(at sea level for 1 min.)**	5000 Vrms coil to contact 1000 Vrms between open contacts
Insulation Resistance	1000 megohms min. at 20°C 500 VDC 50% RH
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature **Operating** **Storage**	At nominal coil voltage -40°C (-40°F) to 90°C (194°F) -40°C (-40°F) to 130°C (266°F)
Vibration	0.062" DA at 10–55 Hz
Shock	10 g
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy, P.C.
Max. Solder Temp.	270°C (518°F)
Max. Solder Time	5 seconds
Max. Solvent Temp.	80°C (176°F)
Max. Immersion Time	30 Seconds
Weight	18.5 grams

NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than “Must Operate” value.
3. Specifications subject to change without notice.

AMERICAN ZETTLER, INC. *www.azettler.com*

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AZ755

RELAY ORDERING DATA

COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance	Form A (SPST)	Form C (SPDT)
5	3.6	9.4	47 ±10%	AZ755–1A–5D	AZ755–1C–5D
6	4.3	11.4	69 ±10%	AZ755–1A–6D	AZ755–1C–6D
9	6.5	17.4	155 ±10%	AZ755–1A–9D	AZ755–1C–9D
12	8.6	22.8	275 ±10%	AZ755–1A–12D	AZ755–1C–12D
18	13.0	27.9	620 ±10%	AZ755–1A–18D	AZ755–1C–18D
24	17.3	45.7	1100 ±15%	AZ755–1A–24D	AZ755–1C–24D
48	34.6	89.0	4400 ±15%	AZ755–1A–48D	AZ755–1C–48D
60	43.2	115.3	6880 ±15%	AZ755–1A–60D	AZ755–1C–60D
110**	79.3	170.5	22900 ±15%	AZ755–1A–110D	AZ755–1C–110D

*Substitute “1B” in place of “1A” or “1C” to indicate 1 Form B contact arrangement. Add suffix “E” for epoxy sealed version, suffix “A” for AgSnO (silver tin oxide) contacts. Add suffix “F” for Class F. Add suffix “136” for silver tin oxide small contacts. When suffix “E” is specified for Epoxy Seal, refer to AZ “Relay Technical Notes” on AZ website - Product Resources. Consult factory for other PCB process conditions that may apply.

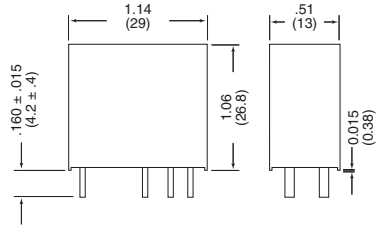
**110V coil not TÜV approved.

HARDWARE ORDERING DATA

DESCRIPTION	ORDER NUMBER	DESCRIPTION	ORDER NUMBER
Socket	ST484–U1	Retainer	ST482–2

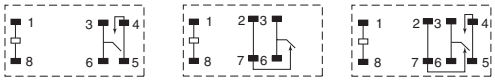
MECHANICAL DATA

Form A and C



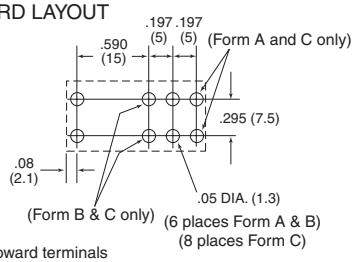
Terminal No.	Dimensions Tol.: ± 0.005 (0.13)
1,2,4,5,7,8	0.018 (0.457) x 0.038 (0.965)
3,6	0.011 (0.279) x 0.038 (0.965)

WIRING DIAGRAM



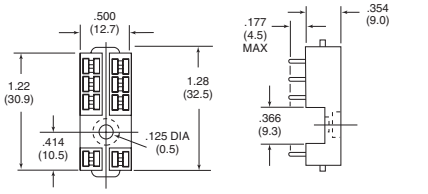
Viewed toward terminals

PC BOARD LAYOUT

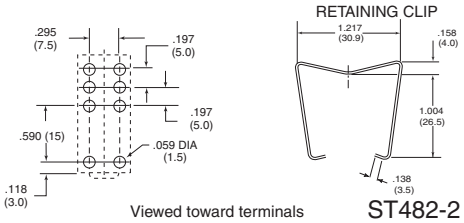


Viewed toward terminals

ST484-U1 HARDWARE



RETAINING CLIP



Viewed toward terminals

ST482-2

Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"

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