

WATER COOLED A.C. SWITCH

2-2W5I-AT636

Repetitive voltage up to

1800 V

Maximum continuous RMS current

1810 A

Surge current

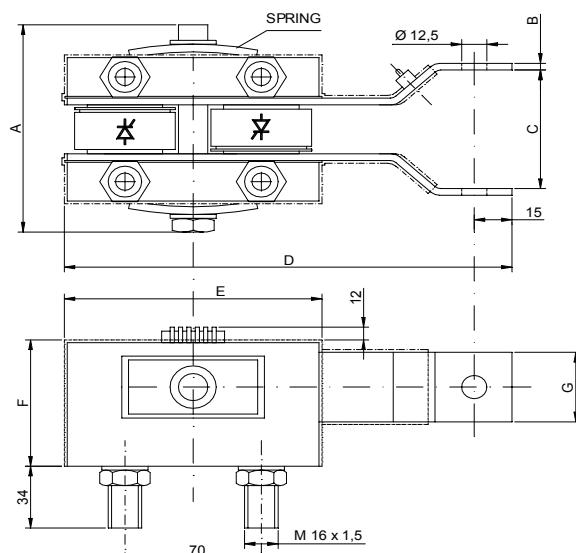
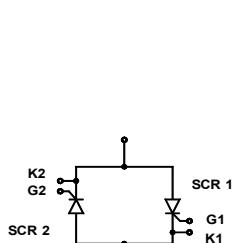
36. kA

FINAL SPECIFICATION

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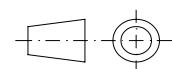
Symbol	Characteristic	Conditions	T _j [°C]	Value	Unit
BLOCKING					
V _D DRM/V _R RRM	Repetitive peak voltage		125	1800	V
V _D SM/V _R SM	Non-repetitive peak voltage		125	1900	V
I _D RM/I _R RM	Repetitive peak current		125	70	mA
CONDUCTING					
I _T (RMS)	Maximum continuous RMS current	50 Hz, Q = 4 l/min, water temperature = 40°C		1810	A
I _T SM	Surge on-state current	Max peak one cycle sine wave, 10 ms.	125	36	kA
I ² t	I ² t	Without reverse voltage reapplied		6480 x1E3	A ² s
V _T TM	Max peak on-state voltage	I _{TM} = 2560 A	125	1.28	V
V _T (TO)	Threshold voltage		125	0.82	V
r _T	On-state slope resistance		125	0.180	mΩ
SWITCHING					
d <i>i</i> /dt	Critical rate of rise of on-state current, min.	From 75% V _D RM up to 1650 A, gate 10 V - 5 Ω	125	200	A/μs
d <i>v</i> /dt	Critical rate of rise of off-state voltage, min.	Linear ramp up to 70% of V _D RM	125	500	V/μs
GATE					
V _{GT}	Gate trigger voltage	VD=5 V	25	3.5	V
I _{GT}	Gate trigger current	VD=5 V	25	300	mA
P _{GM}	Max peak gate power	Pulse width 100 μs	25	150	W
MECHANICAL					
R _{th(j-w)}	Thermal impedance, DC	Junction to water (double side cooled)		0.12	°C/W
V _{ins} (RMS)	Insulation voltage rms	1 min	25	2.5	kV
Press	Max water pressure			10	bar
T _j max	Max operating junction temperature			125	°C
Weight				8000	g
	Thermal switch open 63°C, closed 50°C. 10 A - 250 V				

OUTLINE W1



DEVICES TYPE: AT636

A	160
B	6
C	70
D	250
E	150
F	84
G	50
SPRING	2+2



ORDERING INFORMATION : 2-2W5I-AT636 S 18

standard specification

VDRM&VRMM/100