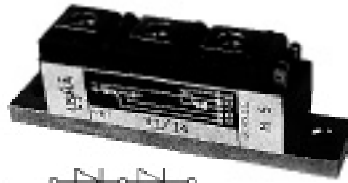


Moulded Module Assembly

PBT 56 / PBH 56



Technical Data

Typical applications : DC Motor control, Temperature control, Professional light dimming.

Type No.		V_{RRM} (Volts)	V_{RSM} (Volts)
PBT 56/04	PBH 56/04	400	500
PBT 56/06	PBH 56/06	600	700
PBT 56/08	PBH 56/08	800	900
PBT 56/10	PBH 56/10	1000	1100
PBT 56/12	PBH 56/12	1200	1300
PBT 56/14	PBH 56/14	1400	1500
PBT 56/16	PBH 56/16	1600	1700

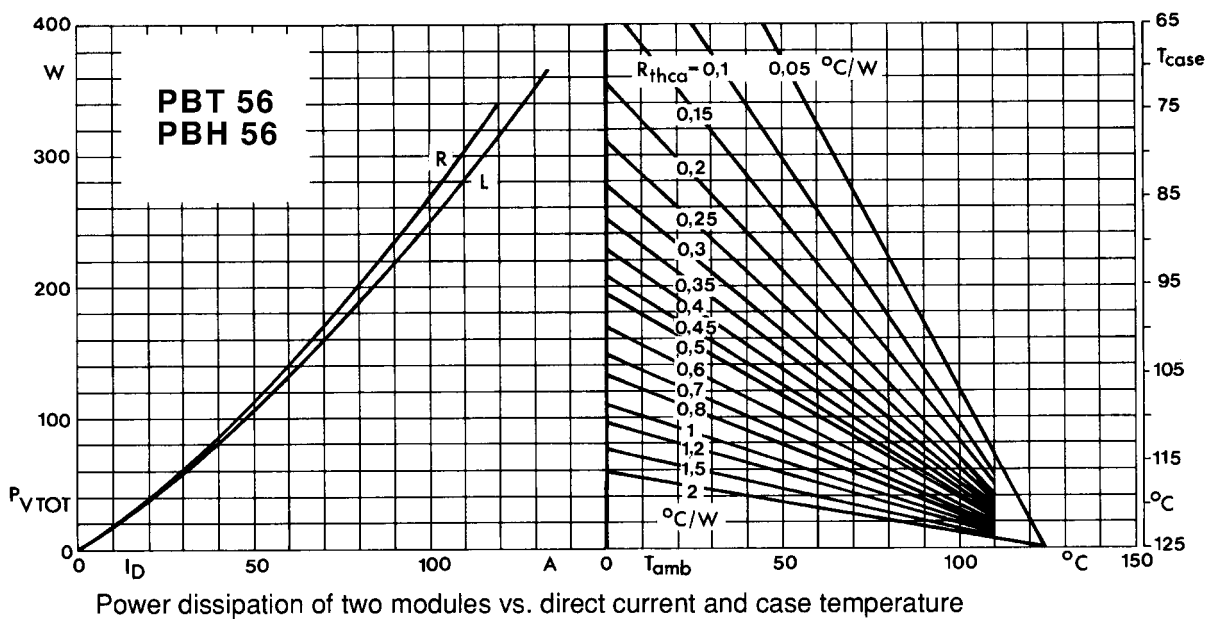
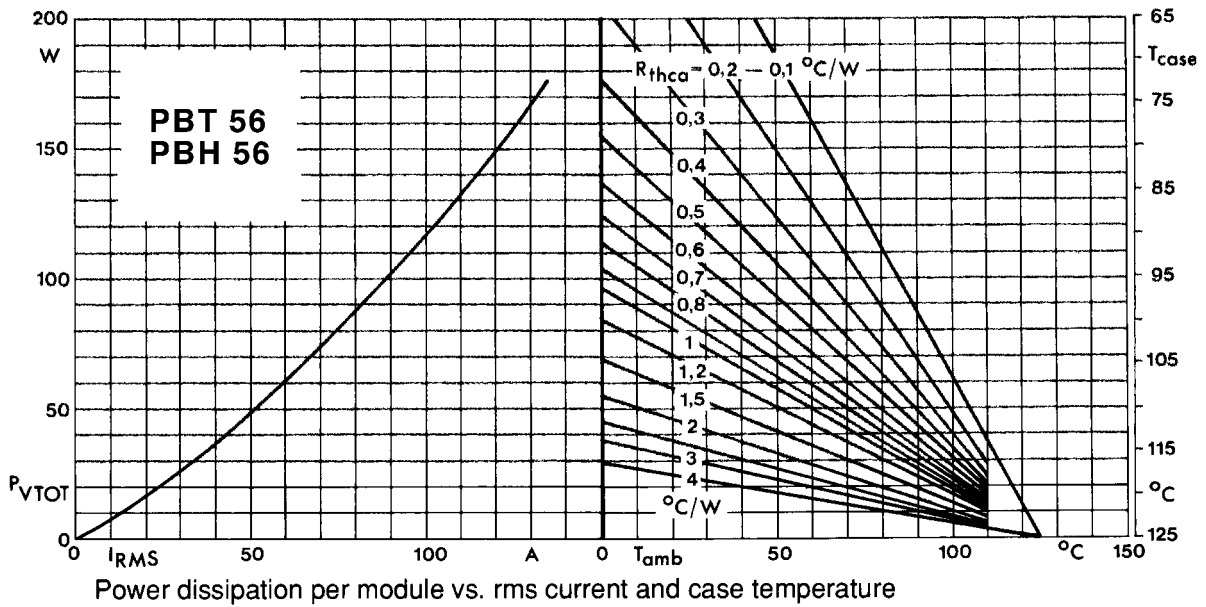
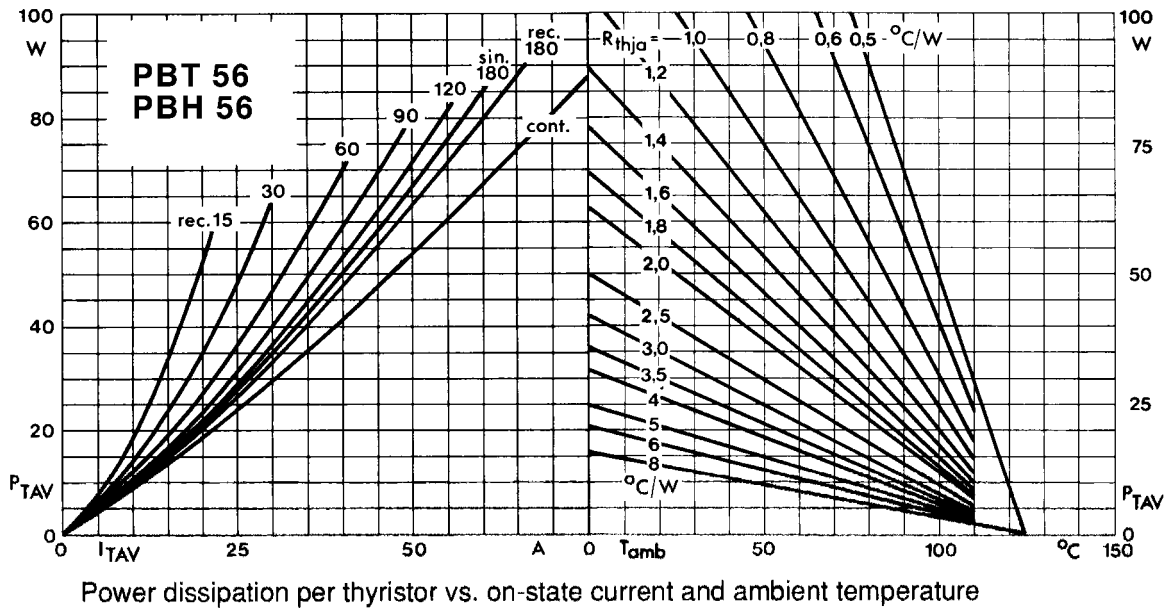
Features

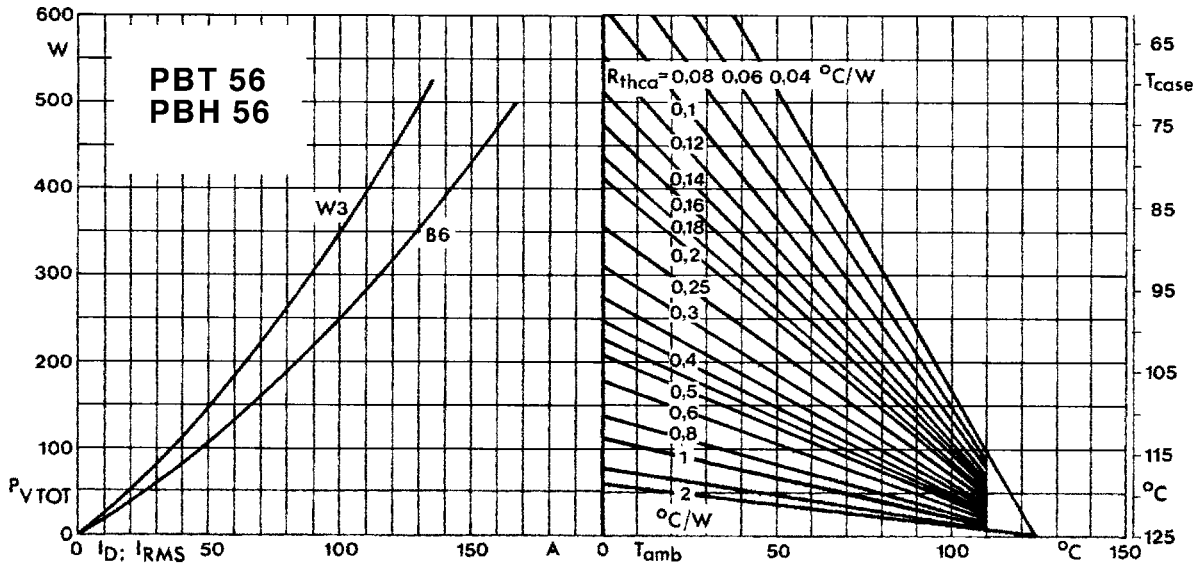
- Heat transfer through ceramic isolated Cu base
- Isolation between contacts & mounting base is 2.5KV(rms)
- Weight 120 gm (Approx)

dv/dt 200 V/ μ s typ. (Higher upto 1000 V/ μ s available on request)

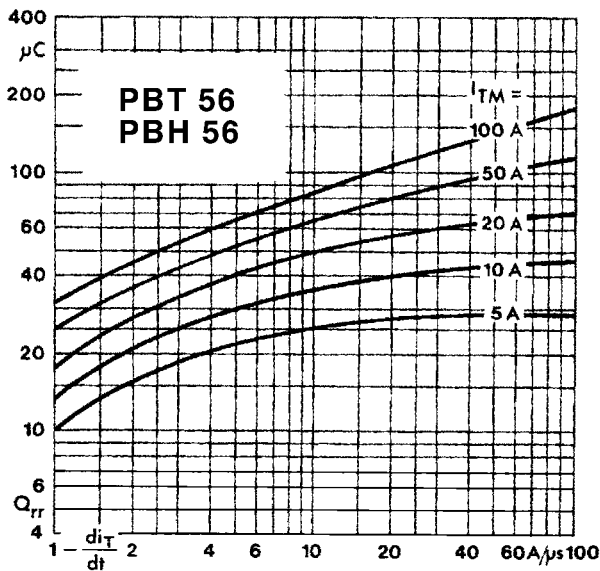
Symbol	Conditions	Units
$I_{F(AV)}$	Sin 180 ; T _{case} = 85 °C	55 A
$I_{(RMS)}$	Absolute maximum	110 A
I_{TSM}	T _{vj} = 25 °C; Half Sine; 10 ms; 0 V _{RRM}	1500 A
	T _{vj} = 125 °C; Half Sine; 10 ms; 0 V _{RRM}	1250 A
I ² t	T _{vj} = 25 °C; Half Sine; 10 ms	11000 A ² s
	T _{vj} = 125 °C; Half Sine; 10 ms	8000 A ² s
di/dt	T _{vj} = 125 °C	100 A/ μ s
tq	T _{vj} = 125 °C; di/dt=10A/ μ s; di/dt=50V/ μ s reapplied	typ. 80 μ s
I _H	T _{vj} = 25 °C	(typ. 150/Max.250)mA
I _L	T _{vj} = 25 °C; R _H 33	(typ. 300/Max.600)mA
V _T	T _{vj} = 25 °C ; I _T = 200 A	1.65V max
V _O	T _{vj} = 125 °C	.9V
R ₀	T _{vj} = 125 °C	3.5 m
I _{DRM} / I _{RRM}	T _{vj} = 125 °C	15 mA max
V _{GT}	T _{vj} = 25 °C ; D.C. value	3V
I _{GT}	T _{vj} = 25 °C ; D.C. value	150 mA
V _{GD}	T _{vj} = 125 °C ; D.C. value	0.25V
I _{GD}	T _{vj} = 125 °C ; D.C. value	5 mA
R _{th(j-c)}	cont.	0.57/0.29 °C/W
R _{th(c-h)}	Sin. 180 per thyristor/ per module	0.6/0.3 °C/W
	rec. 120	.64/0.32 °C/W
		0.20/0.10 °C/W
T _{vj}		-40.....+ 125 °C
T _{stg}		-40.....+ 125 °C
V _{ISOL}	A.C. 50 Hz: r.m.s.; 1min	3 KV



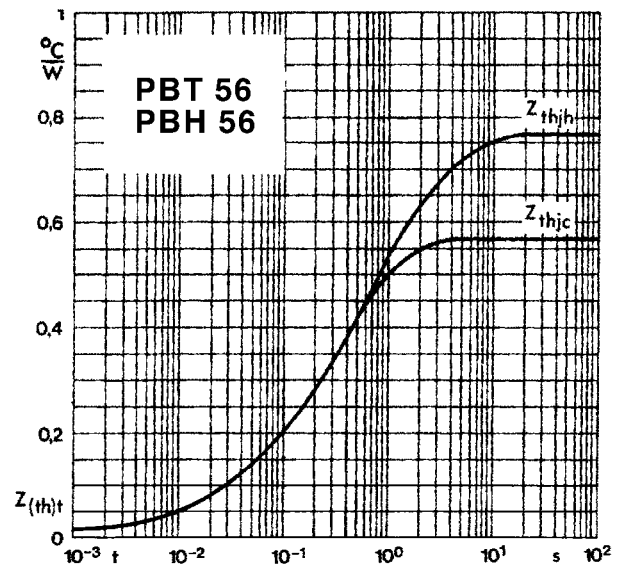




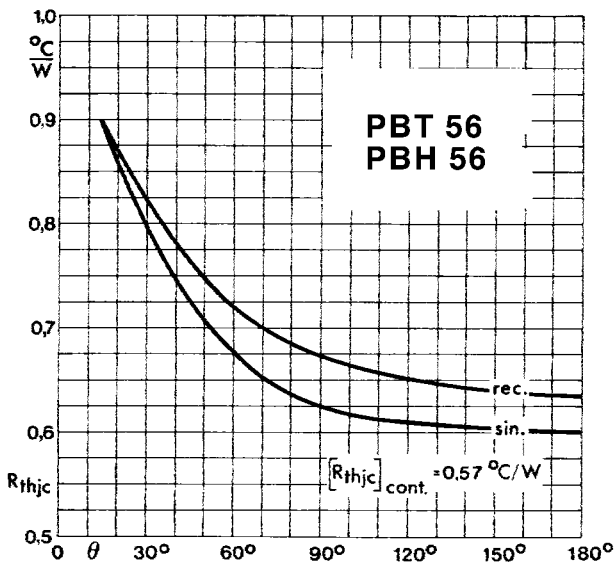
Power dissipation of three modules vs. direct and rms current and case temperature



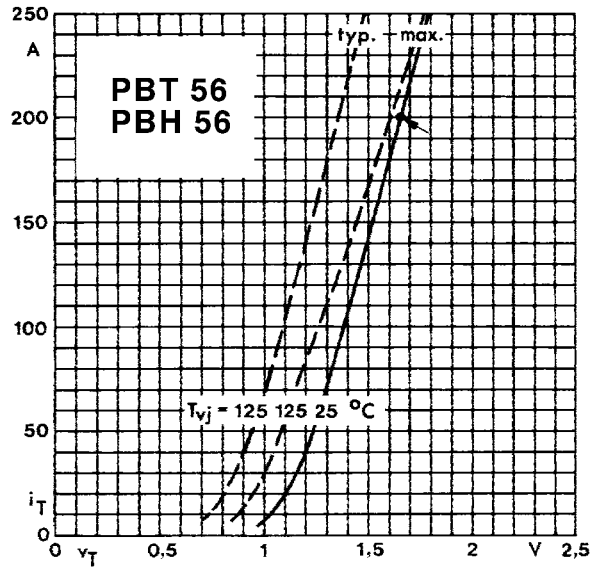
Recovered charge vs. current decrease



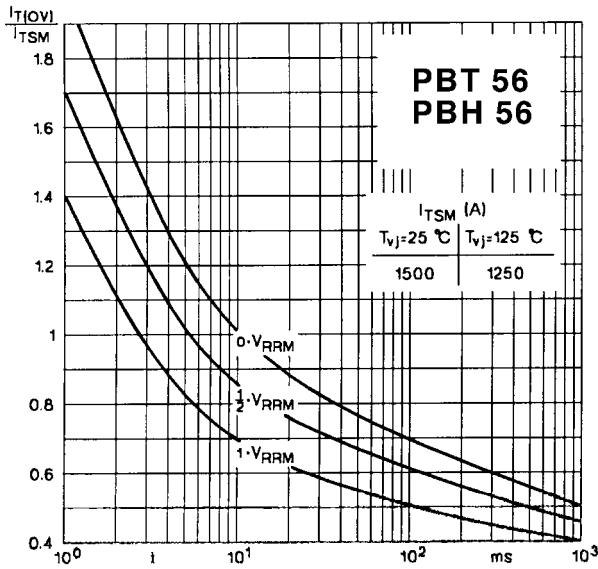
Transient thermal impedance vs. time



Thermal resistance vs. conduction angle

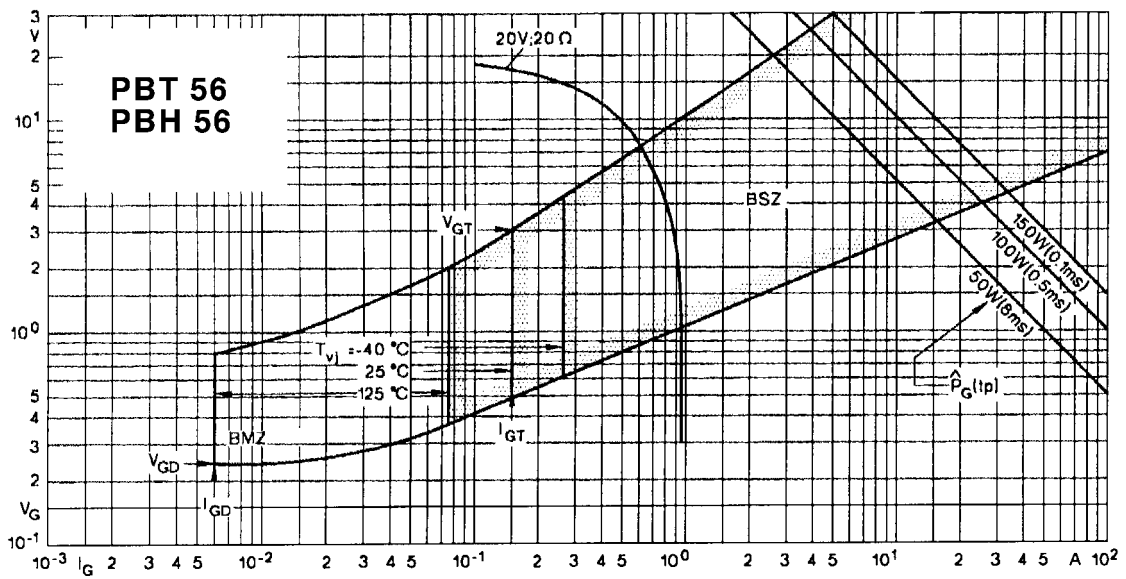


On-state characteristics



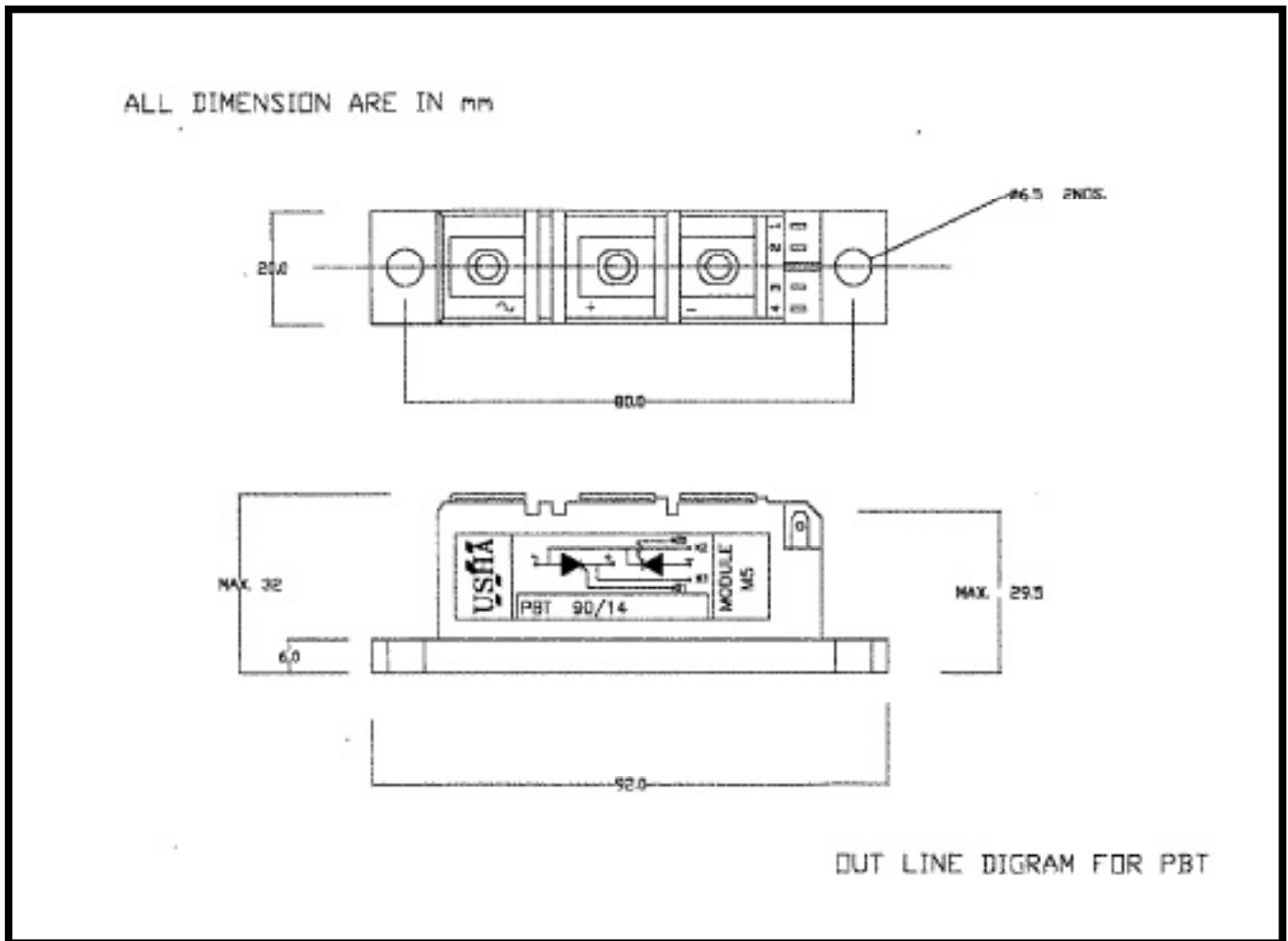
Surge overload current vs. time

\$\$ NOTE : If this test is repeated by the user either as a goods inwards check or as a test of the final equipment, in accordance with IEC Publication 146 (1973), clause 492.1, only a voltage slowly increasing up to 3000V a.c. should be used.



Gate trigger characteristics

MECHANICAL DETAILS



ALL DIMENSIONS IN MM
MOUNTING TORQUE CASE TO HEAT SINK = 5 N.M.
MOUNTING TORQUE BUSBARS TO TERMINALS = 3N.M.

MOUNTING INSTRUCTIONS

- GREASE THE BASE PLATE WITH HEAT SINK COMPOUND BEFORE USE.
- MOUNTING TORQUE NOT TO EXCEED 4Nm FOR BOTH THE BOLTS.
- USE ONLY M5 SCREWS.