

HTZ170C Series

$$I_{F(AV)} = 10 \text{ A}$$

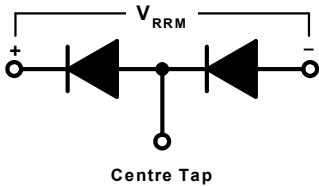
$$V_{RRM} = 2800 \text{ V}$$

High Voltage Diode Rectifier Module

LARONTROL
Electronic Devices

Type Number	Repetitive Peak	Minimum Avalanche Voltage $V_{(BR)R}$	
HTZ170C2.8K	2800	3000	
HTZ170C2.4K	2400	2600	
HTZ170C2K	2000	2200	

CIRCUIT DIAGRAM



CURRENT RATINGS - AIR COOLED

$I_{F(AV)}$	Mean forward current
I_F	Continuous (direct) forward current
$R_{th(j-a)}$	Thermal resistance junction to ambient

Half wave resistive load $T_{amb} = 35^\circ\text{C}$	10	A
$T_{amb} = 35^\circ\text{C}$	10.8	A
	7	$^\circ\text{C/W}$

CURRENT RATINGS - OIL COOLED

$I_{F(AV)}$	Mean forward current
I_T	Continuous (direct) forward current
$R_{th(j-o)}$	Thermal resistance junction to oil

Half wave resistive load $T_{oil} = 60^\circ\text{C}$	21.5	A
$T_{oil} = 60^\circ\text{C}$	23.5	A
	2.5	$^\circ\text{C/W}$

SURGE RATINGS

I^2t	I^2t for fusing
I_{FSM}	Surge (non-repetitive) forward current

10 ms half sine $T_{vj} = 150^\circ\text{C}$	5000	A^2sec
$T_{vj} = 150^\circ\text{C}$	1000	A

TEMPERATURE AND FREQUENCY RATINGS

T_{vj}	Virtual junction temperature
T_{stg}	Storage temperature range
f	Frequency range

Forward (conducting)	180	$^\circ\text{C}$
Reverse (blocking)	180	$^\circ\text{C}$
	-40 to 100	$^\circ\text{C}$
	20 to 400	Hz

CHARACTERISTICS $T_{case} = 25^\circ\text{C}$ unless otherwise stated

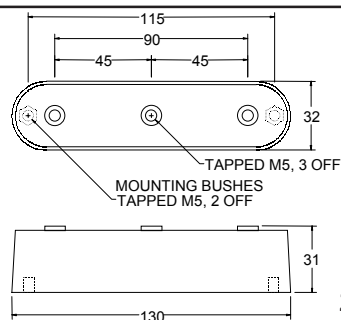
V_{FM}	Forward voltage
I_{RM}	Peak reverse current

At 40 Amps peak	max 1.9	V
At V_{RRM} ; $T_{case} = 150^\circ\text{C}$	max 0.5	mA

Dimensioned Outlines

Dimensions shown are maximum in mm

Weight typ.: 0,28 Kg



IXYS reserves the right to change limits, test conditions and dimensions.

ZC

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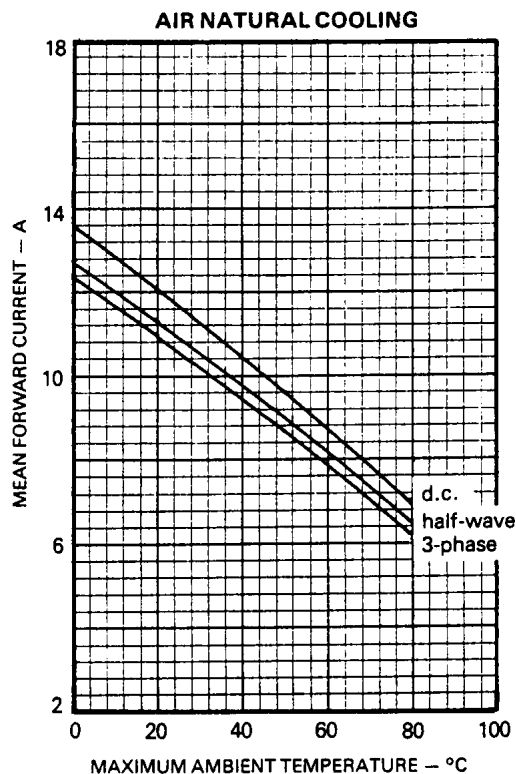
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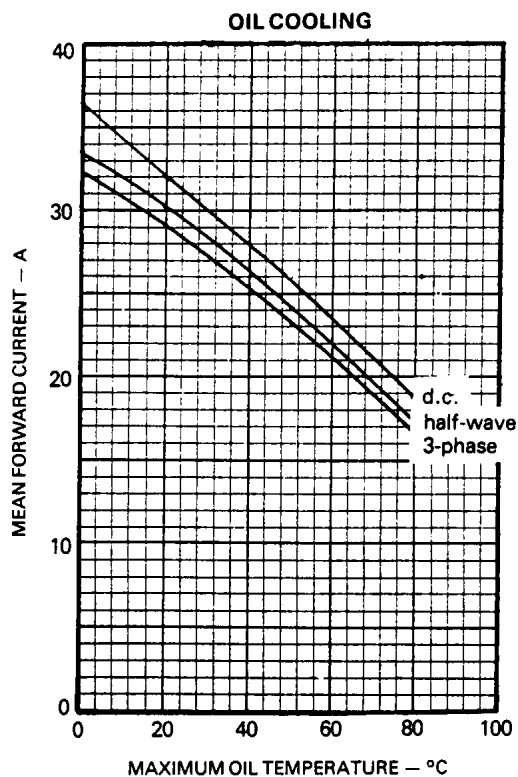
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DERATING CURVES



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