



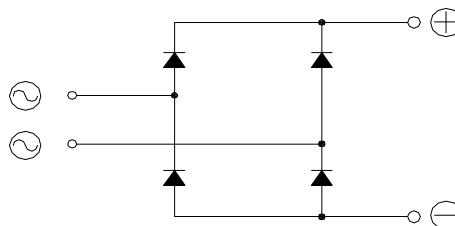
RADDITAL

www.raddital.com

BM50

POWER RECTIFIER BRIDGE

Output Current **50 A**



V_{RRM}	V_{RSM}	P/N
400	500	BM50.04
600	700	BM50.06
800	900	BM50.08
1200	1300	BM50.12
1600	1700	BM50.16

Features

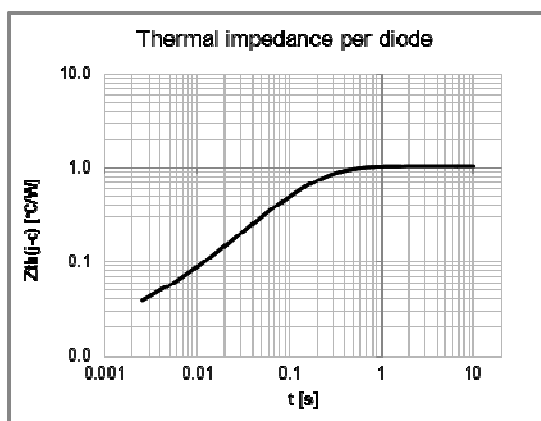
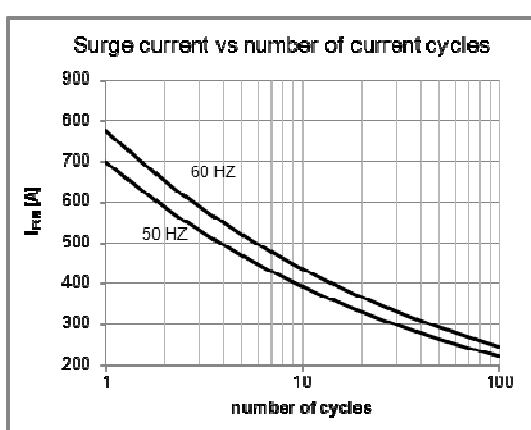
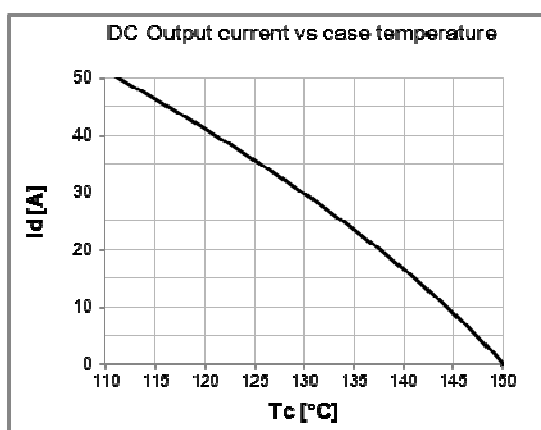
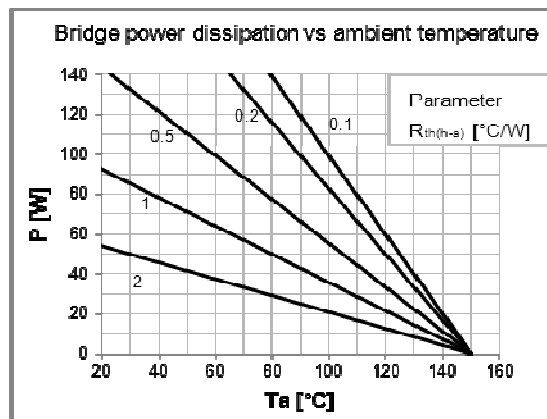
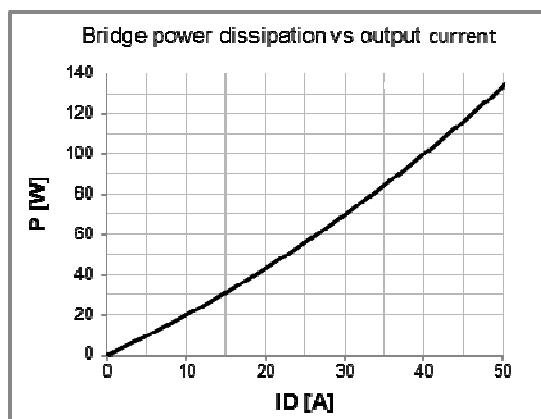
Low forward voltage diodes for high surge capability
Low thermal impedance packaging
Electrically insulated case

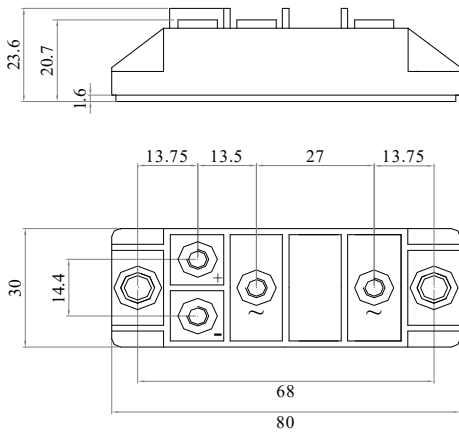
Applications

Input rectifier for variable frequency drives
Battery charger rectifiers
Single phase rectifier for power supplies
Rectifiers for DC motor fields supplies

Diodes characteristics		Conditions	T_j [°C]	Value
I_{RRM}	Max repetitive peak reverse current	$V = V_{RRM}$	150	4 mA
$V_{F(TO)}$	Threshold voltage		150	0,9 V
r_F	Forward slope resistance		150	7,0 mΩ
V_{FM}	Peak forward voltage, max	$I_F = 100A$	25	1,5 V
I_{FSM}	Surge forward current	Half sine wave, 10 ms	150	700 A
I^2t	Max I^2t for fusing		150	2450 A ² s
T_{jmax}	Operating junction temperature			-40 / 150 °C
$R_{th(j-c)}$	Thermal resistance (junction to case)	DC operation		1,04 °C/W
$R_{th(j-c)}$	Thermal resistance (junction to case)	Rectangular wave 180° conduction		1,16 °C/W

Module characteristics		Conditions	Value
I_D	DC output current	$T_c = 111$ °C	50 A
I_D	DC output current	$T_a = 40$ °C ; freely suspended	5 A
V_{INS}	RMS Insulating voltage	50 / 60 Hz $t = 1$ s ($i < 1$ mA)	3600 V
V_{INS}	RMS Insulating voltage	50 / 60 Hz $t = 60$ s ($i < 1$ mA)	3000 V
$R_{th(j-c)}$	Thermal resistance (junction to case)	DC operation	0,261 °C/W
$R_{th(j-c)}$	Thermal resistance (junction to case)	Rect. wave 180° conduction	0,290 °C/W
$R_{th(c-h)}$	Thermal resistance (case to heatsink)	Mounting surface flat, smooth and greased	0,115 °C/W
$R_{th(j-a)}$	Thermal resistance (junction to ambient)	Freely suspended or mounted on an insulator	9,0 °C/W
$R_{th(j-a)}$	Thermal resistance (junction to ambient)	Mounted on a painted metal sheet 250x250x1 mm	3,8 °C/W
T_{stg}	Max storage temperature		150 °C
W	Weight		85 g
M_1	Mounting torque, ± 15 %		4,5 N·m 40 lb·inch
M_2	Terminal connection torque, ± 15 %		3,0 N·m 26 lb·inch




Fig.1
BM50.04-SS5-FIX5-HP-P68-TA

Code:BM60000500006

BM50.06-SS5-FIX5-HP-P68-TA

Code:BM60000500020

BM50.08-SS5-FIX5-HP-P68-TA

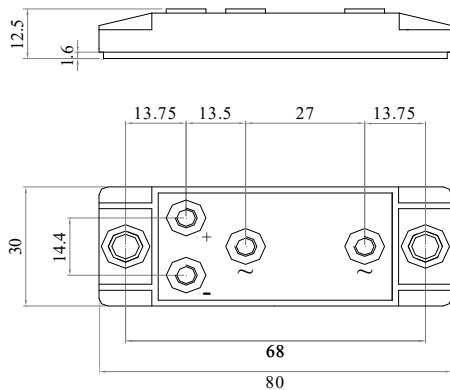
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BM50.12-SS5-FIX5-HP-P68-TA

Code:BM60000500048

BM50.16-SS5-FIX5-HP-P68-TA

Code:BM60000500062


Fig.2
BM50.04-SS5-FIX5-LP-P68-TA

Code:BM60000500005

BM50.06-SS5-FIX5-LP-P68-TA

Code:BM60000500019

BM50.08-SS5-FIX5-LP-P68-TA

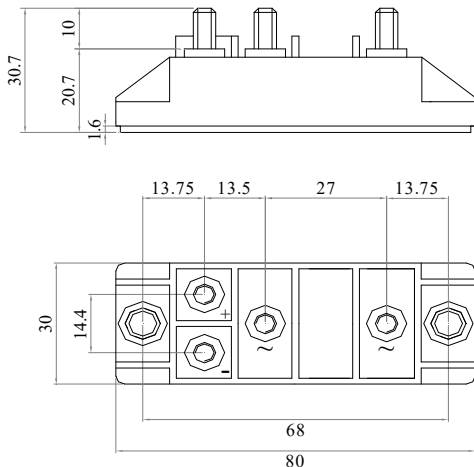
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BM50.12-SS5-FIX5-LP-P68-TA

Code:BM60000500047

BM50.16-SS5-FIX5-LP-P68-TA

Code:BM60000500061


Fig.3
BM50.04-MM5x10-FIX5-HP-P68-TA

Code:BM60000500004

BM50.06-MM5x10-FIX5-HP-P68-TA

Code:BM60000500018

BM50.08-MM5x10-FIX5-HP-P68-TA

Code:BM60000500032

BM50.12-MM5x10-FIX5-HP-P68-TA

Code:BM60000500046

BM50.16-MM5x10-FIX5-HP-P68-TA

Code:BM60000500060

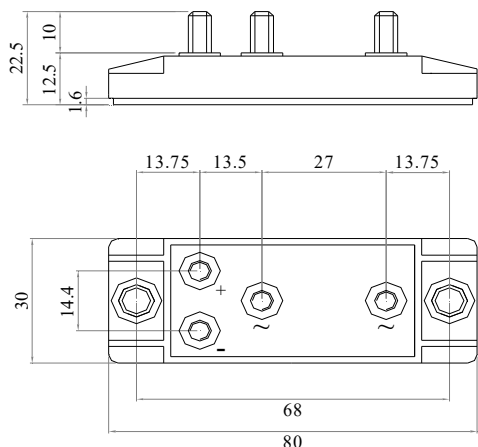
Voltage:04=400V 06=600V 08=800V 12=1200V 16=1600V
Power fix:

SS=Screw (M5)

MM=Bolt (M5)

Mounting fix:

FIX= Ø5,5


Fig.4
BM50.04-MM5x10-FIX5-LP-P68-TA

Code:BM60000500003

BM50.06-MM5x10-FIX5-LP-P68-TA

Code:BM60000500017

BM50.08-MM5x10-FIX5-LP-P68-TA

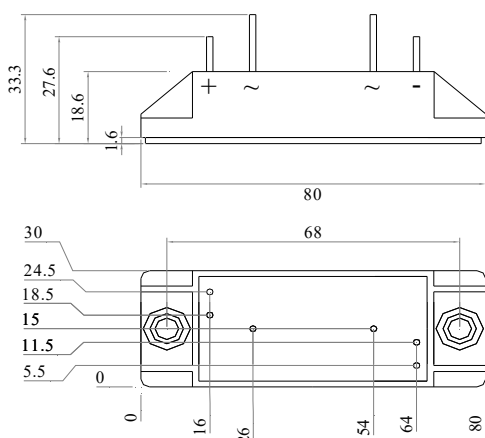
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BM50.12-MM5x10-FIX5-LP-P68-TA

Code:BM60000500045

BM50.16-MM5x10-FIX5-LP-P68-TA

Code:BM60000500059


Fig.5
BM50.04-LLØ1.2-FIX5-HP-P68-TA

Code:BM60000500002

BM50.06-LLØ1.2-FIX5-HP-P68-TA

Code:BM60000500016

BM50.08-LLØ1.2-FIX5-HP-P68-TA

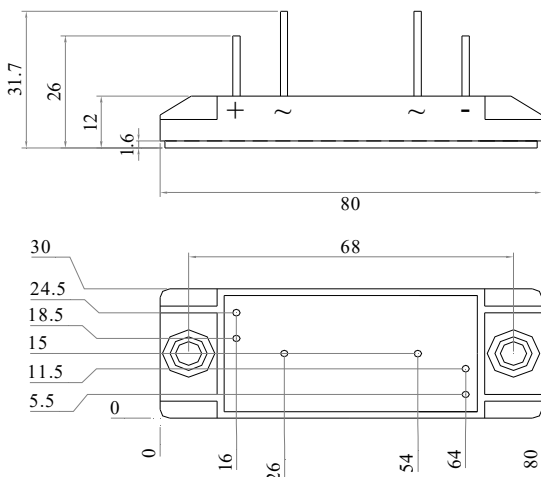
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BM50.12-LLØ1.2-FIX5-HP-P68-TA

Code:BM60000500044

BM50.16-LLØ1.2-FIX5-HP-P68-TA

Code:BM60000500058


Fig.6
BM50.04-LLØ1.2-FIX5-LP-P68-TA

Code:BM60000500001

BM50.06-LLØ1.2-FIX5-LP-P68-TA

Code:BM60000500015

BM50.08-LLØ1.2-FIX5-LP-P68-TA

Code:BM60000500029

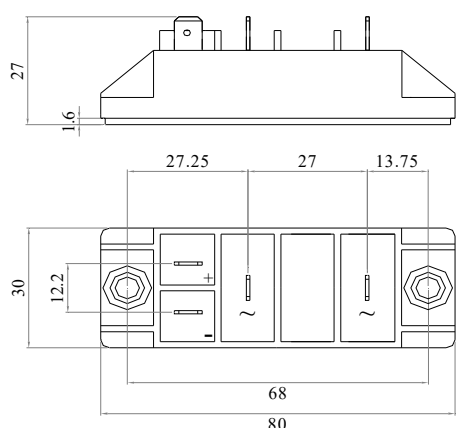
BM50.12-LLØ1.2-FIX5-LP-P68-TA

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BM50.16-LLØ1.2-FIX5-LP-P68-TA

Code:BM60000500057

Voltage:04=400V 06=600V 08=800V 12=1200V 16=1600V
Power fix:
MM=Bolt (M5)
LL=Legs (Ø1,2)
Mounting fix:
FIX= Ø5,5


Fig.7
BM50.04-FF-FIX5-HP-P68-TA

Code:BM60000500000

BM50.06-FF-FIX5-HP-P68-TA

Code:BM60000500014

BM50.08-FF-FIX5-HP-P68-TA

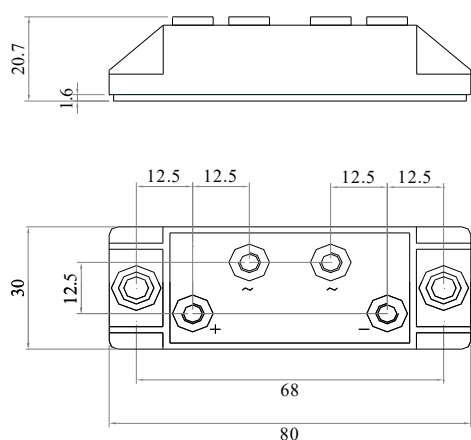
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BM50.12-FF-FIX5-HP-P68-TA

Code:BM60000500042

BM50.16-FF-FIX5-HP-P68-TA

Code:BM60000500056


Fig.8
BM50.04-SS5-FIX5-HP-P68-TB

Code:BM60000500013

BM50.06-SS5-FIX5-HP-P68-TB

Code:BM60000500027

BM50.08-SS5-FIX5-HP-P68-TB

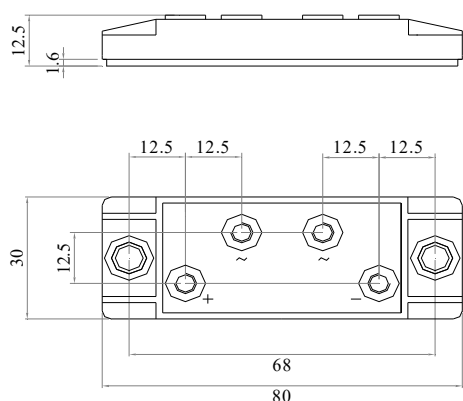
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BM50.12-SS5-FIX5-HP-P68-TB

Code:BM60000500055

BM50.16-SS5-FIX5-HP-P68-TB

Code:BM60000500069


Fig.9
BM50.04-SS5-FIX5-LP-P68-TB

Code:BM60000500012

BM50.06-SS5-FIX5-LP-P68-TB

Code:BM60000500026

BM50.08-SS5-FIX5-LP-P68-TB

Code:BM60000500040

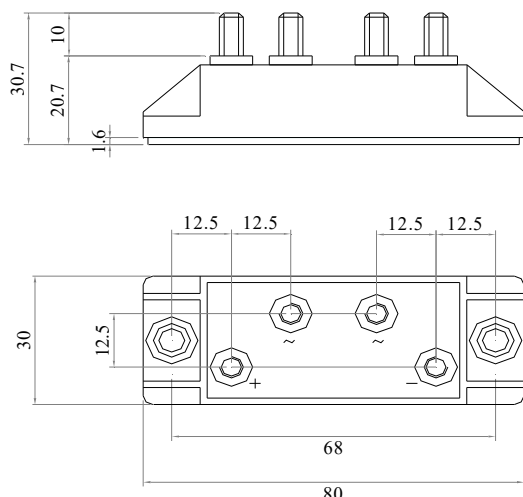
BM50.12-SS5-FIX5-LP-P68-TB

Code:BM60000500054

BM50.16-SS5-FIX5-LP-P68-TB

Code:BM60000500068

Voltage:04=400V 06=600V 08=800V 12=1200V 16=1600V
Power fix:
FF=Faston(6,3x0,8)
SS=Screw (M5)
Mounting fix:
FIX= Ø5,5


Fig.10
BM50.04-MM5x10-FIX5-HP-P68-TB

Code:BM60000500011

BM50.06-MM5x10-FIX5-HP-P68-TB

Code:BM60000500025

BM50.08-MM5x10-FIX5-HP-P68-TB

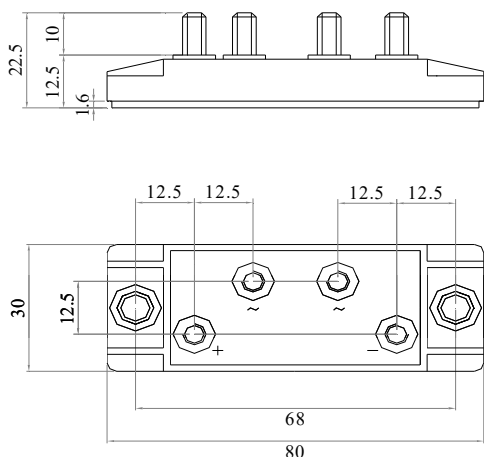
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BM50.12-MM5x10-FIX5-HP-P68-TB

Code:BM60000500053

BM50.16-MM5x10-FIX5-HP-P68-TB

Code:BM60000500067


Fig.11
BM50.04-MM5x10-FIX5-LP-P68-TB

Code:BM60000500010

BM50.06-MM5x10-FIX5-LP-P68-TB

Code:BM60000500024

BM50.08-MM5x10-FIX5-LP-P68-TB

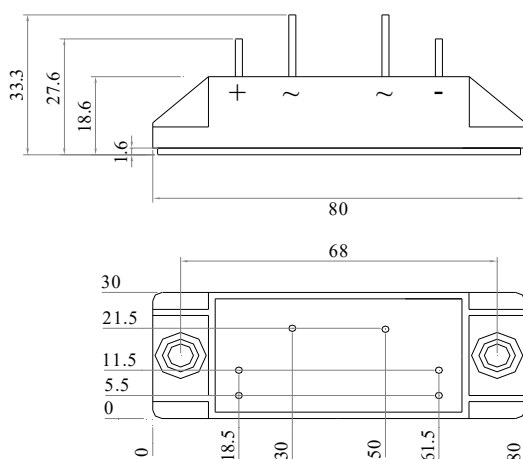
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BM50.12-MM5x10-FIX5-LP-P68-TB

Code:BM60000500052

BM50.16-MM5x10-FIX5-LP-P68-TB

Code:BM60000500066


Fig.12
BM50.04-LLØ1.2-FIX5-HP-P68-TB

Code:BM60000500009

BM50.06-LLØ1.2-FIX5-HP-P68-TB

Code:BM60000500023

BM50.08-LLØ1.2-FIX5-HP-P68-TB

Code:BM60000500037

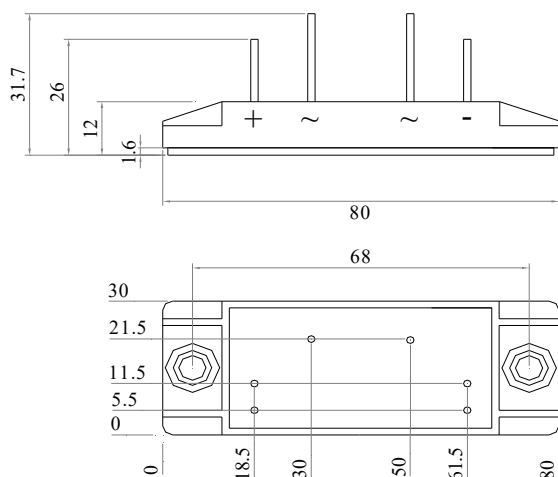
BM50.12-LLØ1.2-FIX5-HP-P68-TB

Code:BM60000500051

BM50.16-LLØ1.2-FIX5-HP-P68-TB

Code:BM60000500065

Voltage:04=400V 06=600V 08=800V 12=1200V 16=1600V
Power fix:
MM=Bolt (M5)
LL=Legs (Ø1,2)
Mounting fix:
FIX= Ø5,5


Fig.13
BM50.04-LLØ1.2-FIX5-LP-P68-TB

Code:BM60000500008

BM50.06-LLØ1.2-FIX5-LP-P68-TB

Code:BM60000500022

BM50.08-LLØ1.2-FIX5-LP-P68-TB

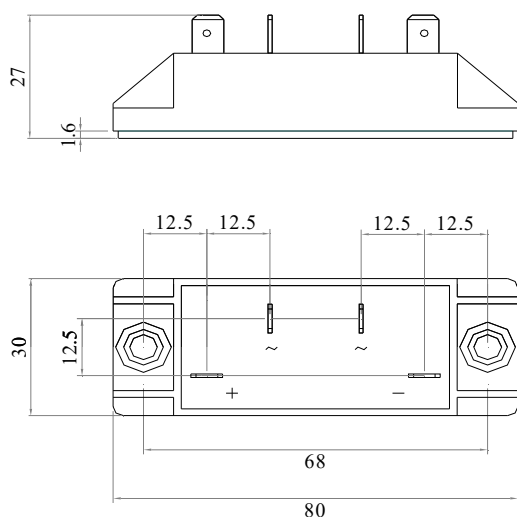
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BM50.12-LLØ1.2-FIX5-LP-P68-TB

Code:BM60000500050

BM50.16-LLØ1.2-FIX5-LP-P68-TB

Code:BM60000500064


Fig.14
BM50.04-FF-FIX5-HP-P68-TB

Code:BM60000500007

BM50.06-FF-FIX5-HP-P68-TB

Code:BM60000500021

BM50.08-FF-FIX5-HP-P68-TB

Code:BM60000500035

BM50.12-FF-FIX5-HP-P68-TB

Code:BM60000500049

BM50.16-FF-FIX5-HP-P68-TB

Code:BM60000500063

Voltage:04=400V 06=600V 08=800V 12=1200V 16=1600V
Power fix:

LL=Legs (Ø1,2)

FF=Faston(6,3x0,8)

Mounting fix:

FIX= Ø5,5