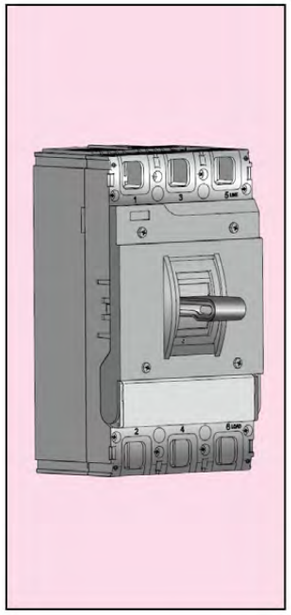
EATON 辉能

HNM3GDC系列 产品使用说明书

HNM3GDC Series User Manual



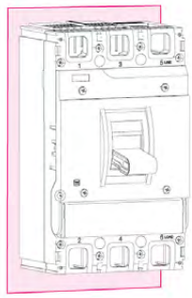
触电危险！
Electric Current ! Danger to life !

警告

只允许专业人员和受过专业训练的人员进行下列工作
Only skilled or instructed persons may carry out the following operations

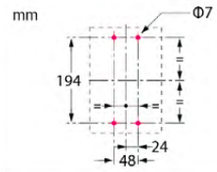
伊顿辉能低压电器（江苏）有限公司
Eaton Huineng Low-Voltage Electrical (Jiangsu) Co., Ltd.

HNM3GDC-3

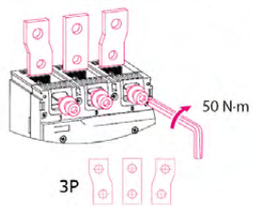


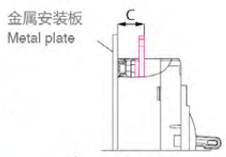
3P	4	GB70.1 M10X25 DIN6796 Φ10
3P	4	GB9074.8 M6X100
3P	4	GB97.1 6 GB6170 M6

内六角扳手 Hexagon wrench　　十字螺丝刀 Cross screwdrive



极间距扩展器连接
Connection terminal between poles



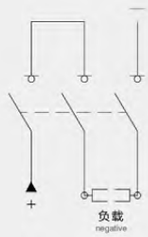


注意：C≥44
Note: C≥44

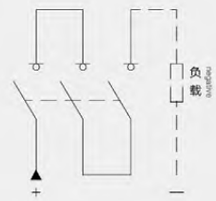
接线方式
Wiring Method

HNM3GDC-3 200-400A
3P断路器
3P Circuit breaker

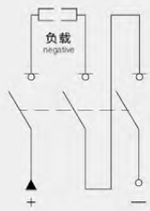
E型接线方式
Wiring Method of E



F型接线方式
Wiring Method of F

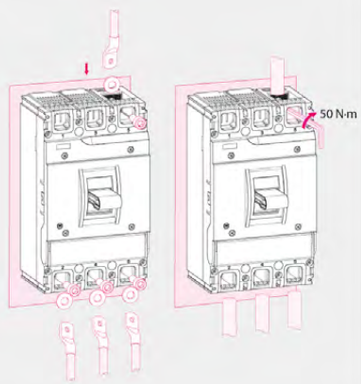


M型接线方式
Wiring Method of M



板前接线
Front Panel Connection

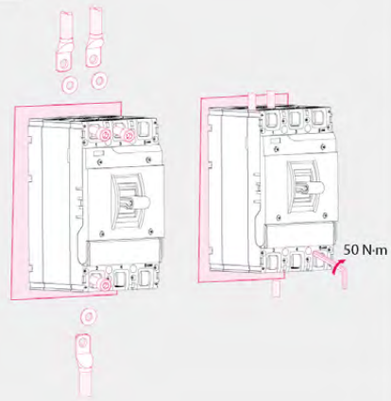
HNM3GDC-3
E型接线方式
Wiring Method of E



GB70.1 M10X25
DIN6796 Φ10

板前接线
Front Panel Connection

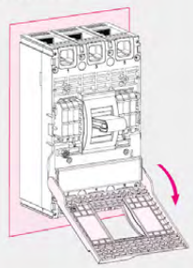
HNM3GDC-3
M型接线方式
Wiring Method of M



GB70.1 M10X25
DIN6796 Φ10

电气附件安装
Electrical accessories installation

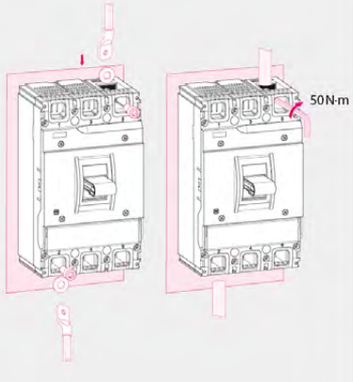
HNM3GDC-3



附件 Name	安装位置 Position	附件 Name	安装位置 Position
SHT	L2+L3/R2+R3	AX	L1/L2 /L3 /R1/R2/R3
UVT	R2+R3	AL	L1/L2

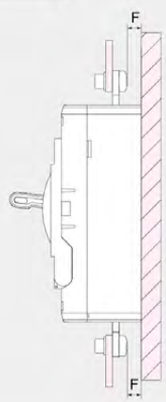
板前接线
Front Panel Connection

HNM3GDC-3
F型接线方式
Wiring Method of F



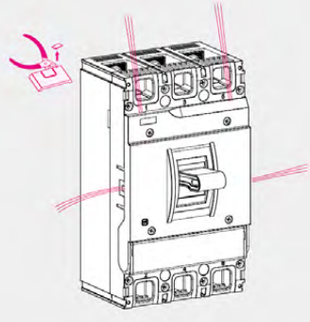
GB70.1 M10X25
DIN6796 Φ10

安全间距
Safe distance



注意 Attention
对于断路器如果F< 8时必须使用绝缘隔板
For circuit breakers the phase separator must be used if F<8

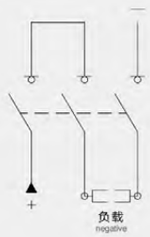
内部附件引线连接图
Lead direction of accessories

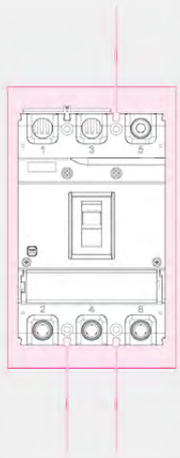


202407

相间隔板（K6）安装
Phase separator (K6)

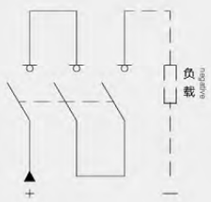
HNM3GDC-3
3P断路器
3P Circuit breaker
E型接线方式
Wiring Method of E

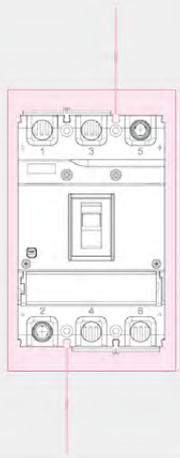




相间隔板（K6）安装
Phase separator (K6)

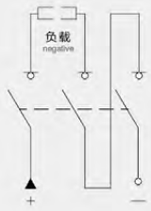
HNM3GDC-3
3P断路器
3P Circuit breaker
F型接线方式
Wiring Method of F

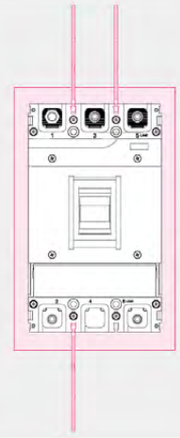




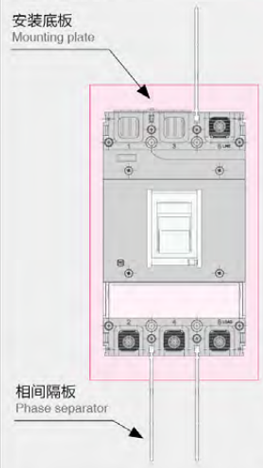
相间隔板（K6）安装
Phase separator (K6)

HNM3GDC-3
3P断路器
3P Circuit breaker
M型接线方式
Wiring Method of M





HNM3GDC-3



注意方向
Attention direction

用于E、F型
Used for E and F types

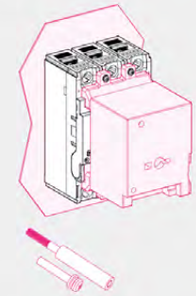
用于M型
Used for M types

3P	E 型接线方式 Wiring Method of E	3个
	F 型接线方式 Wiring Method of F	2个
	M 型接线方式 Wiring Method of M	3个

注1：绝缘板为标配
Note1:Insulation board is standard configuration
注2：不同接线方式下，相间隔板的安装位置不同
Note2: Installation position of phase spacer is different under different wiring method

电动操作机构(CD)
Motor operator

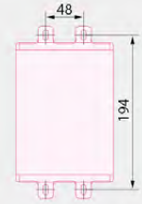
HNM3GDC-3



GB9074.8 M6X12
GB6170 M6

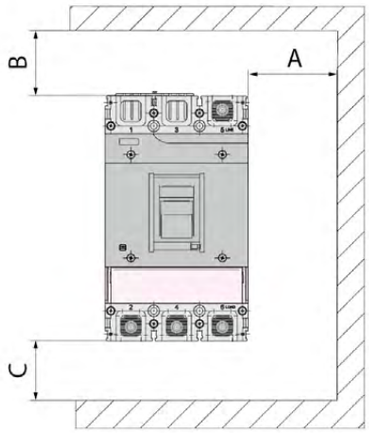
转动手柄操作机构(CS)
Rotary handle operator

HNM3GDC-3



GB9074.8 M4X85
GB6170 M4

断路器安装安全间隙
Safe gap of a circuit breaker



A：到导电回路
（包括无遮挡物或有接地金属）：
B：断路器侧部到侧墙
（包括无遮挡物或有接地金属）
C：断路器端子到底墙

A: To conductivecircuit (including without shetter or with earthed metals)
B: The side case of the circuit breaker to the side wall (including without shelter or with earthed metals)
C: The terminals of the circuit breaker to the bottom wall

注：必须安装相间隔板或零飞弧罩

Note: The interphase barrier or zero arcventing cover should be installed

型号 Model	A	B	C
HNM3GDC-3	50	25	50

HNM3GDC 断路器适用的不同电源系统/负载接线方式
The wiring merhod of power / load for HNM3GDC series circuit breaker

额定工作电压 Rated operating voltage	电源/负载接线方式 The wiring merhod of load						
	不接地系统 Ungrounded system			负极接地系统 Negative polarity grounding system			中性点接线系统 Mid-point wiring system
DC1000V	E	—	—	—	F	—	M
DC1500V	E	—	M	—	F	—	M

注：

① 在负极接地系统中，用户需要保证非接地极（正极）串联仅可能多的触头。

② 在不接地系统和中心点接地系统，推荐采用上表的接线方式。用户也可根据实际情况对正负极进行互换，同时也可对电源及负载接线位置进行互换。

Note:

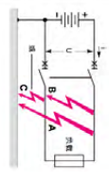
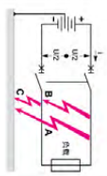
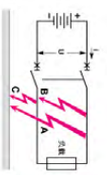
(1) In the system of negative polarity grounding, users need to ensure as many contacts as possible for non-grounding polarity(positive polarity) in series.

(2) In the system of ungrounded system and mid-point grounding system,wiring modes in the above table will be recommended. Users can interchange the positive and negative polarity according to the actual situations and also users can interchange wiring positions of power and load at the same time.

不同额定电流的连接导线的参考截面
Cross-sectional areas of connecting wires with different rated currents

额定电流 (A) Rated current	10	16 20	25	32	40 50	63	80	100	125 140	160	180 200 225	250	315 350	400
导线截面积 (mm^2) Cross-sectional area of wire	1.5	2.5	4	6	10	16	25	35	50	70	95	120	185	240

接地系统方式
Earthed systems

系统类型 Types of systems		接地系统 Earthed systems		不接地系统 Isolated polarities
		负极接地 Negative polarity connected to earth	中心点接地 Mid-point connected to earth	
各种故障类型 Various types of faults				
故障影响 Failure effect	故障A Fault A	产生最大短路电流接电源正极的触头分断 Maximum Isc the contacts which connect the positive poles of the power supply will enable disconnection	U/2电压产生最大短路电流接电源正极的触头分断 Maximum Isc at U/2 the contacts which connect the positive poles of the power supply will enable disconnection	无影响 No consequences
	故障B Fault B	产生最大短路电流但串联的触头都参与分断 Maximum Isc the contacts which connect will enable disconnection	产生最大短路电流但串联的触头都参与分断 Maximum Isc the contacts which connect will enable disconnection	产生最大短路电流但串联的触头都参与分断 Maximum Isc the contacts which connect will enable disconnection
	故障C Fault C	无影响 No consequences	与故障A相同但只对接电源正极的触头 Same as Fault A on only the contacts which connect the positive poles of the power supply	无影响 No consequences
最严重情况 Most unfavourable cases		故障A Fault A	故障A和C Fault A and C	故障B Fault B
分断极情况 The case of breaking poles		可在正极串联共同执行分断 Can be connected in series at the positive pole all poles will enable disconnection	对每极，在U/2时执行分断最大短路电流 For every pole, will enable disconnection maximum Isc at U/2	两极共同执行分断 Two poles will enable disconnection