

HCM1 DC Contactor

PRODUCT SELECTION MANUAL

Operative Norm : GB14048.4/IEC60947-4-1:2009/EN1175-2020 Appendix B

RoHS
REACH



Mounting bracket options for DC contactors:



HCM1-C

Weight: 346g



HCM1-Z

361g



HCM1-V

336g



HCM1-T

347g

1. HCM1 Electrical parameters

Coil parameters	12V	24V	36V	48V
Coil working time (INT)	Max Sustained Duty Cycle 25%/Max On Time 6min			
Pull In Voltage(VDC) ≤60%V	7V	14V	21.2V	28.5V
Hold Voltage (VDC) 5%-30% V	0.96V	1.92V	2.8V	3.8V
Coil Resist Ohms±8%	5Ω	21Ω	48Ω	85Ω
Resistive Load Carry/Interrupt Capability(Amps)	150/260A	150/260A	150/260A	150/260A
Peak Inductive Inrush Capability(Amps)	800A	800A	800A	800A
Electrical Cycle Life ≥	300000	300000	300000	300000
Contact Material	Copper contact			

Coil parameters	60V	72V		
Coil working time (INT)	25%/6min			
Pull In Voltage(VDC) ≤60%V	36V	43.2V		
Hold Voltage (VDC) 5%-30% V	0.96V	1.92V		
Coil Resist Ohms±8%	133Ω	192Ω		
Resistive Load Carry/Interrupt Capability(Amps)	50/80A	50/80A		
Peak Inductive Inrush Capability(Amps)	800A	800A		
Electrical Cycle Life ≥	300000	300000		
Contact Material	Copper contact			

Coil parameters	12V	24V	36V	48V
Coil working time (INT)	100% Continuous Work			
Pull In Voltage(VDC) ≤60%V	8V	15.8V	23.8V	31.6V
Hold Voltage (VDC) 5%-30% V	0.96V	1.92V	2.8V	3.8V
Coil Resist Ohms±8%	10Ω	41Ω	92Ω	165Ω
Resistive Load Carry/Interrupt Capability(Amps)	150/250A	150/250A	150/225A	150/225A
Peak Inductive Inrush Capability(Amps)	800A	800A	800A	800A
Electrical Cycle Life ≥	100000	100000	100000	100000
Contact Material	Copper contact			

2、HCM1-L Electrical Parameters

Coil parameters	12V	24V	36V	48V
Coil working time (INT)	25%/3min			
Pull In Voltage(VDC) ≤60%V	7V	14V	21.2V	28.5V
Hold Voltage (VDC) 5%-30% V	1.3V	1.92V	2.8V	3.8V
Coil Resist Ohms±8%	4.5Ω	17Ω	39Ω	62Ω
Resistive Load Carry/Interrupt Capability(Amps)	300/350A	300/350A	300/260A	300/260A
Peak Inductive Inrush Capa-bility(Amps)	1600A	1600A	1600A	1600A
Electrical Cycle Life≥	300000	300000	300000	300000
Contact Material	Copper contact			

Coil parameters	60V	72V		
Coil working time (INT)	25%/3min			
Pull In Voltage(VDC) ≤60%V	36V	43.2V		
Hold Voltage (VDC) 5%-30% V	0.96V	1.92V		
Coil Resist Ohms±8%	133Ω	192Ω		
Resistive Load Carry/Interrupt Capability(Amps)	50/80A	50/80A		
Peak Inductive Inrush Capa-bility(Amps)	1200A	1200A		
Electrical Cycle Life≥	300000	300000		
Contact Material	Copper contact			

Coil parameters	12V	24V	36V	48V
Coil working time (INT)	100% Continuous Work			
Pull In Voltage(VDC) ≤60%V	8V	15.8V	23.8V	31.6V
Hold Voltage (VDC) 5%-30% V	0.96V	1.92V	2.8V	3.8V
Coil Resist Ohms±8%	10Ω	41Ω	92Ω	165Ω
Resistive Load Carry/Interrupt Capability(Amps)	200/300A	200/300A	200/225A	200/225A
Peak Inductive Inrush Capa-bility(Amps)	1200A	1200A	1200A	1200A
Electrical Cycle Life≥	100000	100000	100000	100000
Contact Material	Copper contact			

3、Mechanical Performance Parameters

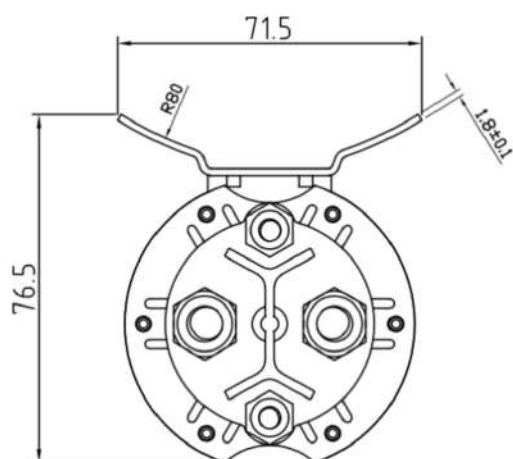
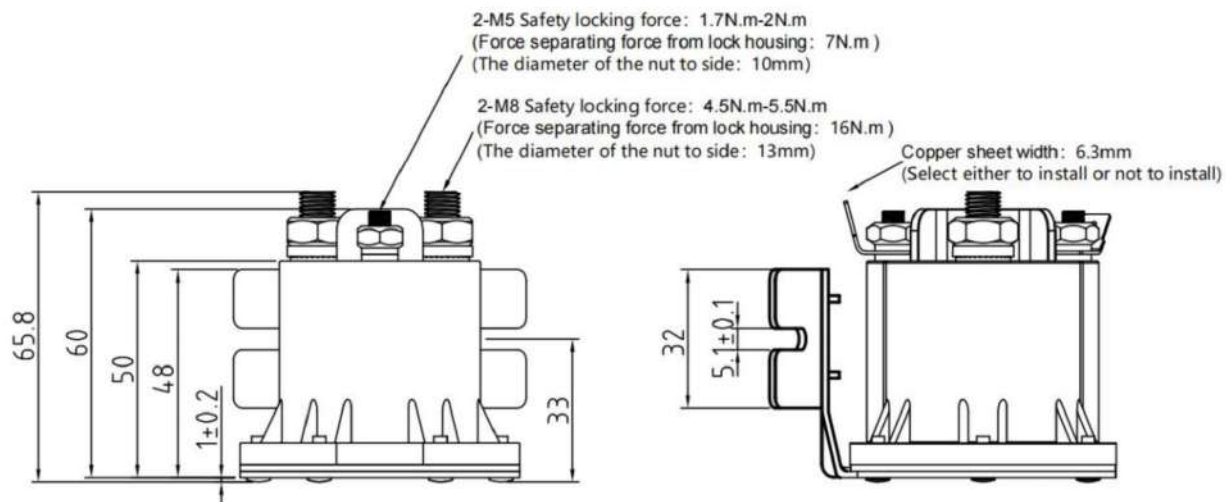
Coil M5 Wiring Screw	Locking Force 2-5N.m
Contact M8 Wiring Screws	Locking Force 6-9N.m
The Mounting Bracket is Optional	Arc, straight plate, V type, T type

4、Enviromental Parameter

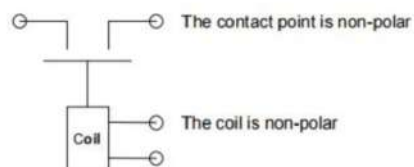
Storage and transportation temperature range	-40°C to 85°C
Operating temperature range	-40°C to 65°C
Levels of protection	IP67

Dimensional Drawing

HCM1-C1

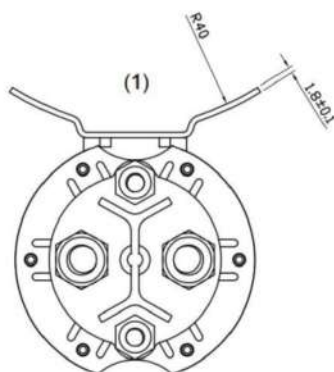


branching program

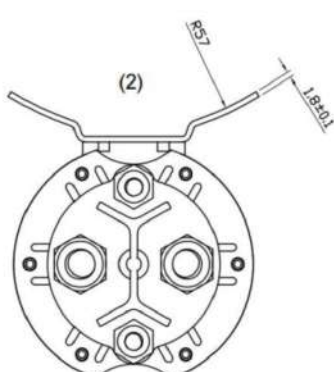


Selection of stent radian:

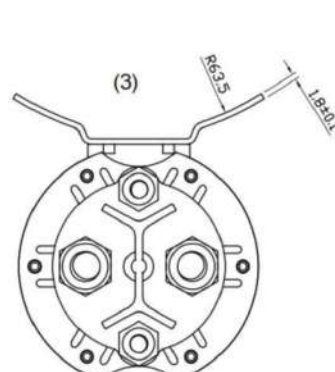
0.8KW Motor



1.6-2.2KW Motor

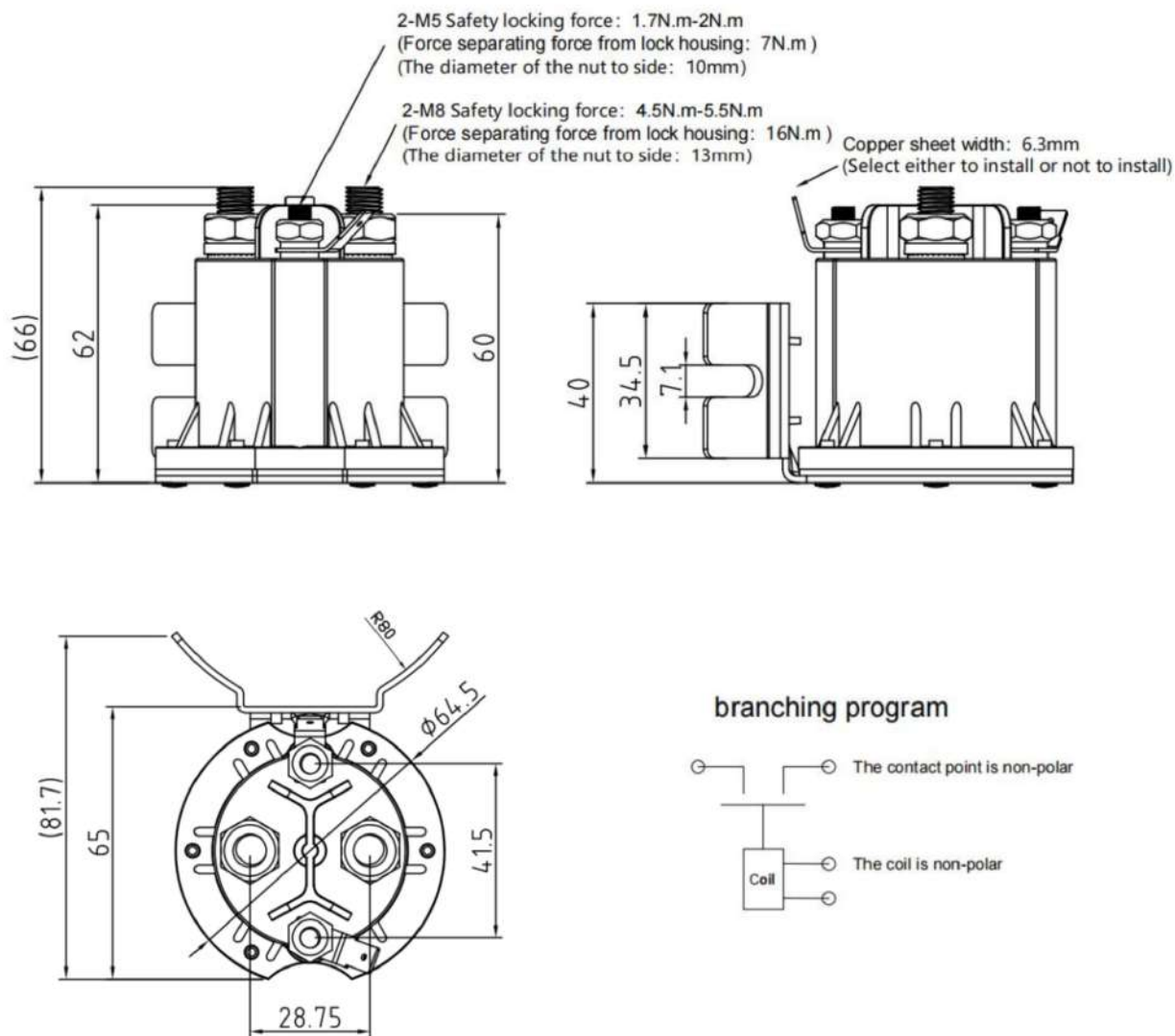


3KW Motor



Dimensional Drawing

HCM1-C2

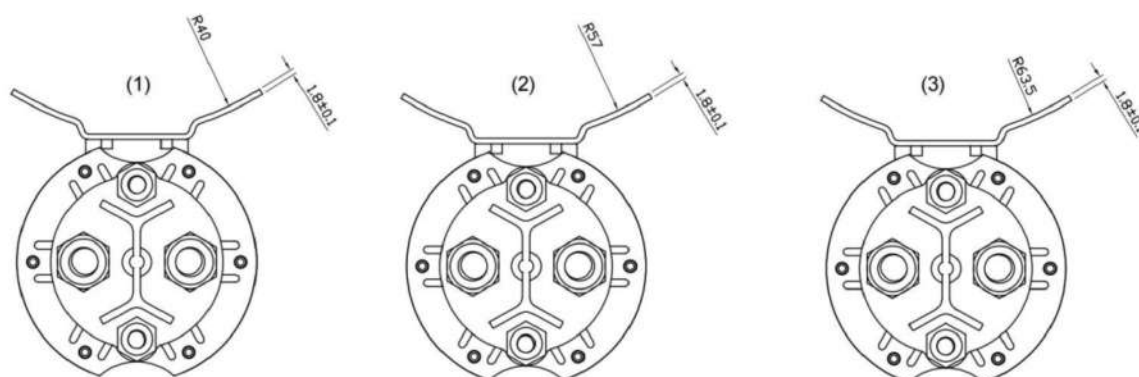


Selection of stent radian:

0.8KW Motor

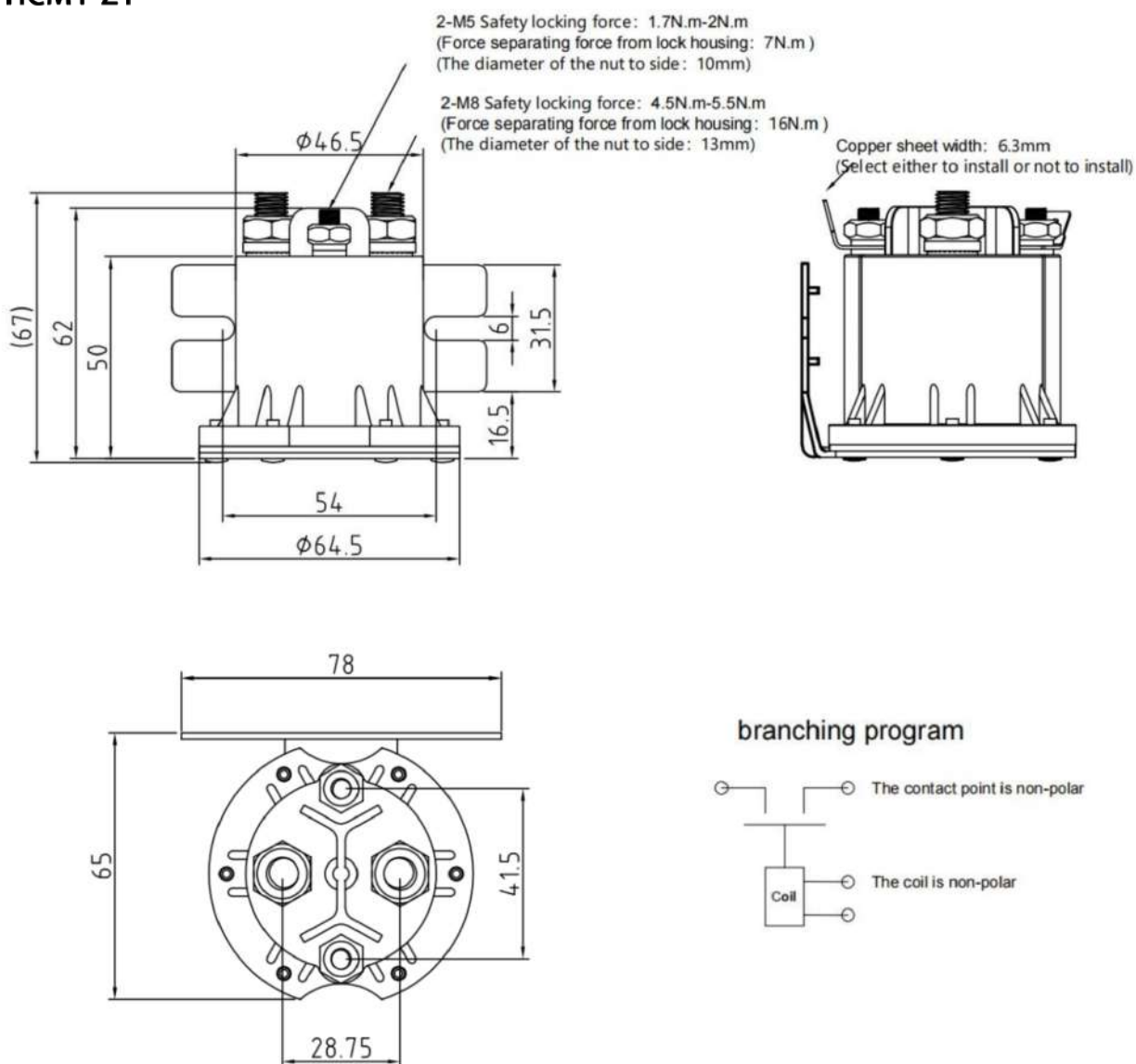
1.6-2.2KW Motor

3KW Motor



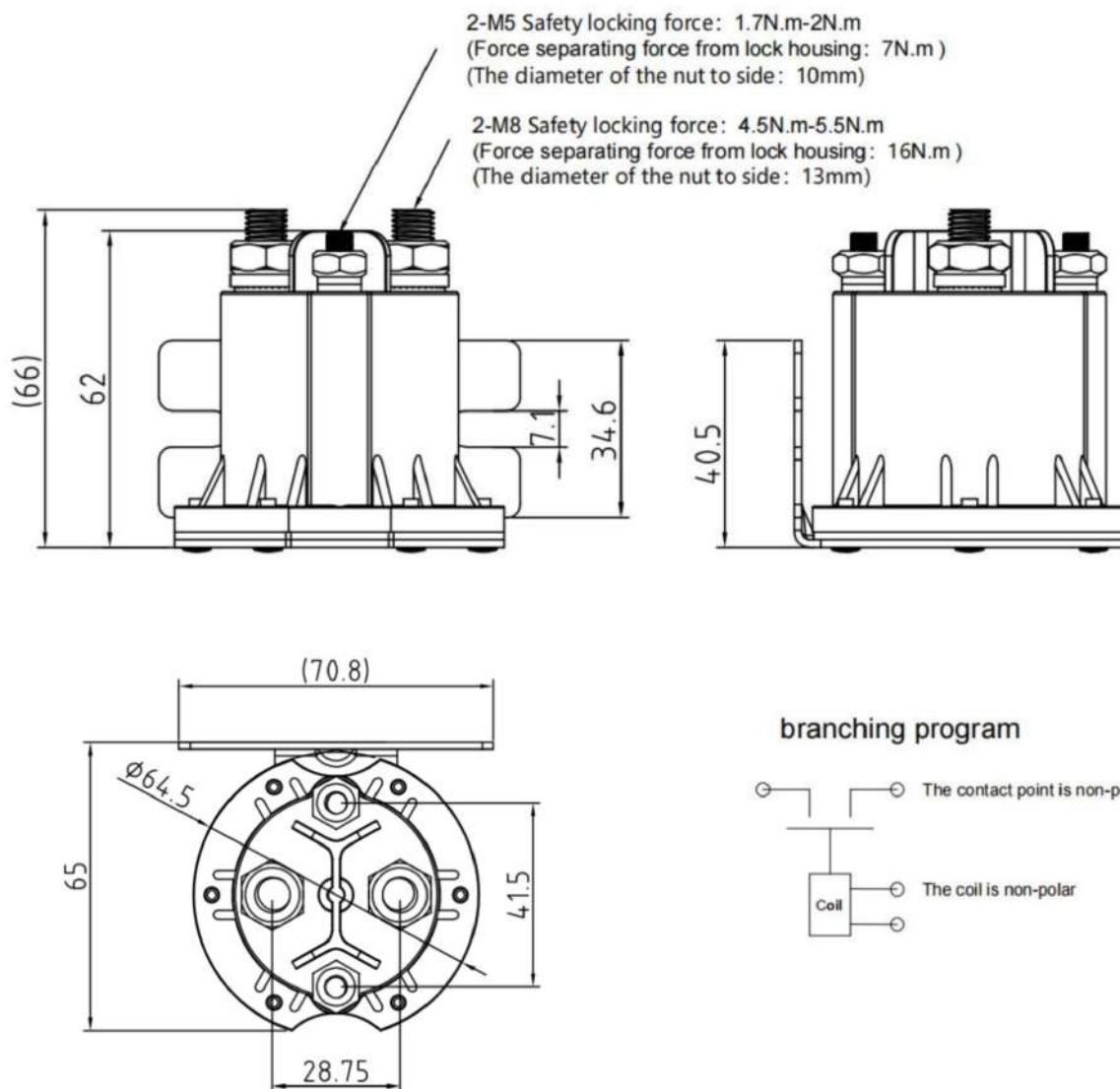
Dimensional Drawing

HCM1-Z1



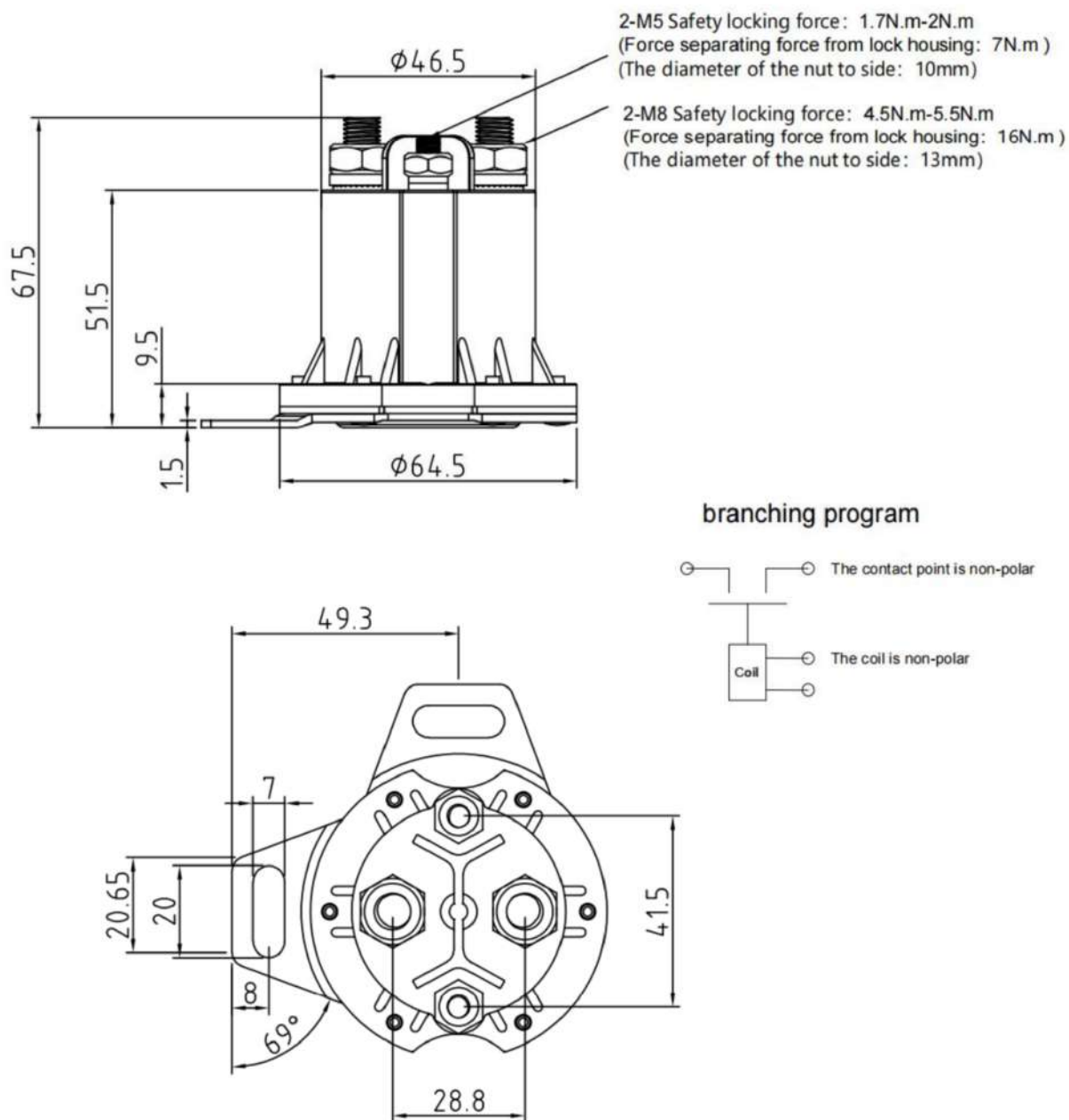
Dimensional Drawing

HCM1-Z2



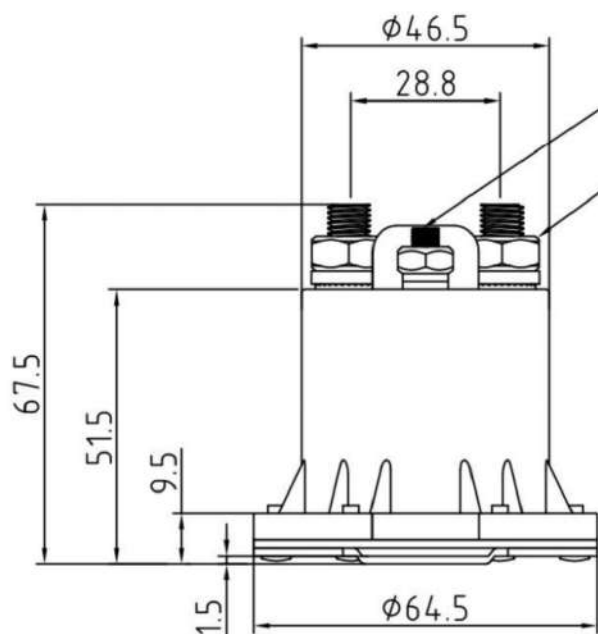
Dimensional Drawing

HCM1-V



Dimensional Drawing

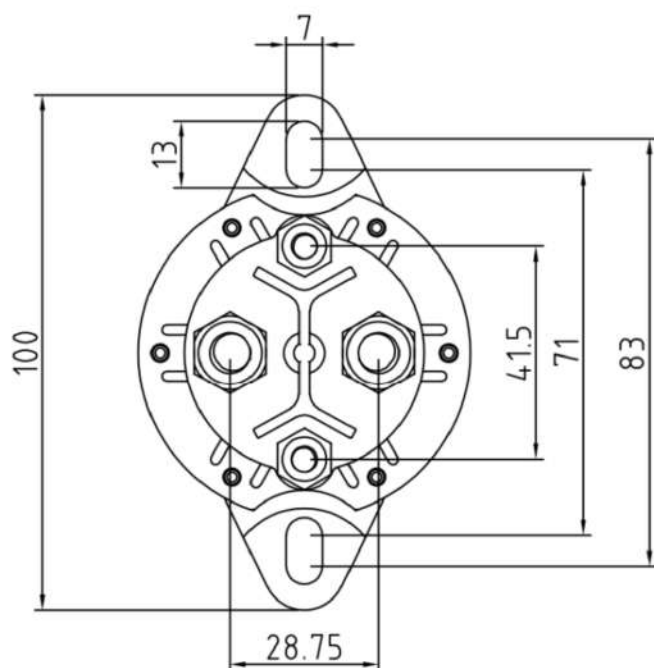
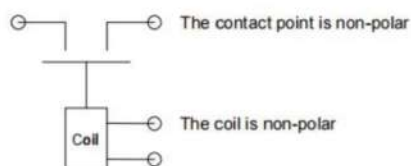
HCM1-T



2-M5 Safety locking force: 1.7N.m-2N.m
(Force separating force from lock housing: 7N.m)
(The diameter of the nut to side: 10mm)

2-M8 Safety locking force: 4.5N.m-5.5N.m
(Force separating force from lock housing: 16N.m)
(The diameter of the nut to side: 13mm)

branching program





3、HCM1-F-C1 Electrical Parameters

Coil parameters	12V	24V	36V	48V
Coil working time (INT)	25%/6min			
Pull In Voltage(VDC) ≤60%V	7V	14V	21.2V	28.5V
Hold Voltage (VDC) 5%-30% V	0.96V	1.92V	2.8V	3.8V
Coil Resist Ohms±8%	4.5Ω	17Ω	39Ω	62Ω
Resistive Load Carry/Interrupt Capability(Amps)	300/350A	300/350A	225/260A	225/260A
Peak Inductive Inrush Capa-bility(Amps)	1600A	1600A	1600A	1600A
Electrical Cycle Life ≥	300000	300000	300000	300000
Contact Material	Silver Contact			

Coil parameters	60V	72V		
Coil working time (INT)	25%/6min			
Pull In Voltage(VDC) ≤60%V	36V	43.2V		
Hold Voltage (VDC) 5%-30% V	0.96V	1.92V		
Coil Resist Ohms±8%	133Ω	192Ω		
Resistive Load Carry/Interrupt Capability(Amps)	50/80A	50/80A		
Peak Inductive Inrush Capa-bility(Amps)	1000A	1000A		
Electrical Cycle Life ≥	300000	300000		
Contact Material	Silver Contact			

Coil parameters	12V	24V	36V	48V
Coil working time (INT)	100%连续			
Pull In Voltage(VDC) ≤60%V	8V	15.8V	23.8V	31.6V
Hold Voltage (VDC) 5%-30% V	0.96V	1.92V	2.8V	3.8V
Coil Resist Ohms±8%	10Ω	41Ω	92Ω	165Ω
Resistive Load Carry/Interrupt Capability(Amps)	200/300A	200/300A	200/225A	200/225A
Peak Inductive Inrush Capa-bility(Amps)	1200A	1200A	1200A	1200A
Electrical Cycle Life ≥	100000	100000	100000	100000
Contact Material	Silver Contact			

3、Mechanical Performance Parameters

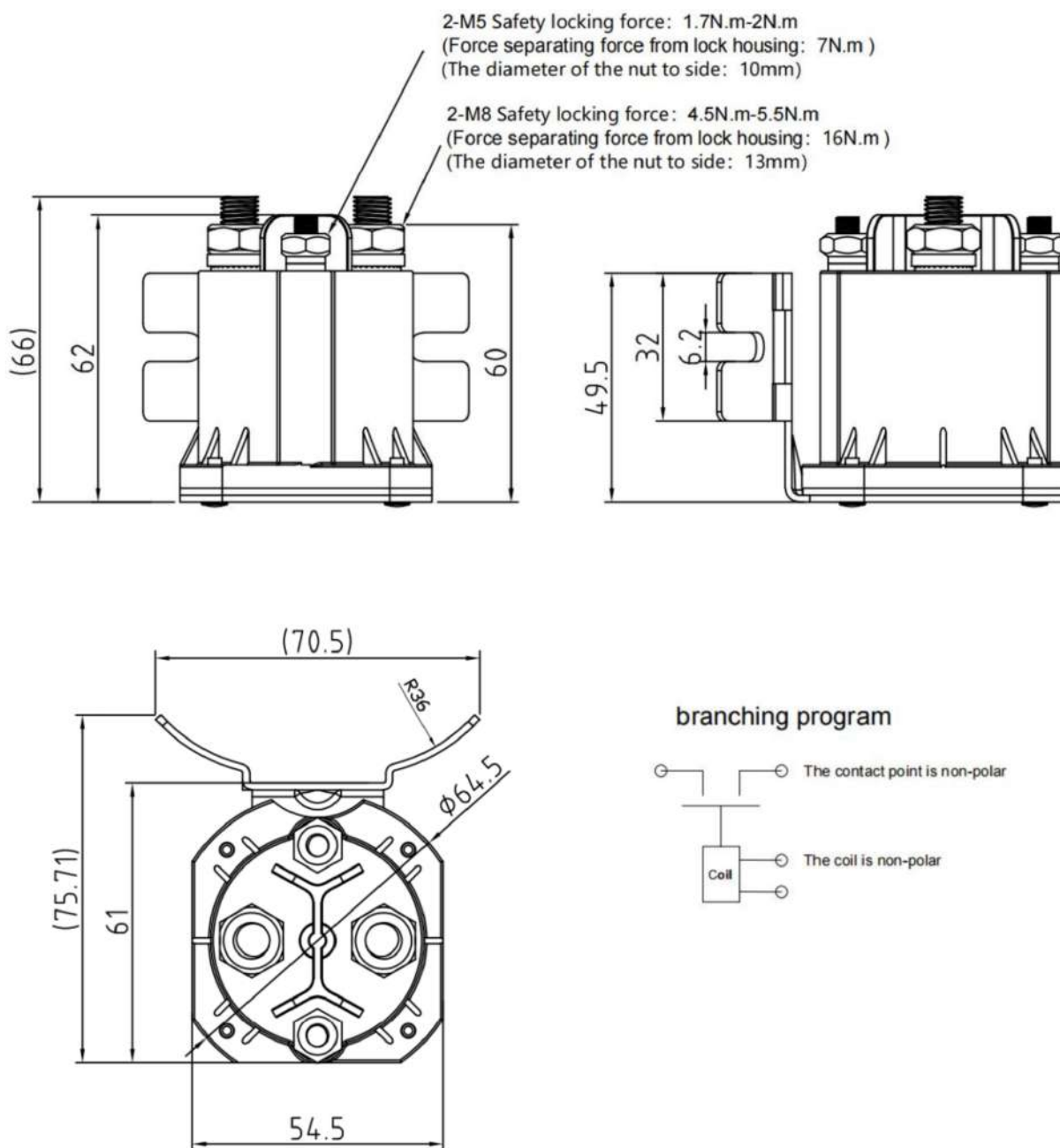
Coil M5 Wiring Screw	Locking Force 2-5N.m
Contact M8 Wiring Screws	Locking Force 6-9N.m
The Mounting Bracket is Optional	Arc, straight plate, V type, T type

4、Enviromental Parameter

Storage and transportation temperature range	-40°C to 85°C
Operating temperature range	-40°C to 65°C
Levels of protection	IP67

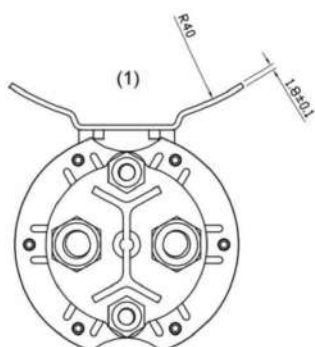
Dimensional Drawing

HCM1-F-C1

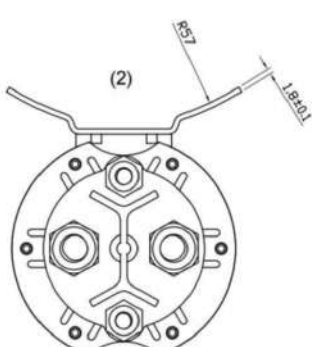


Selection of stent radian:

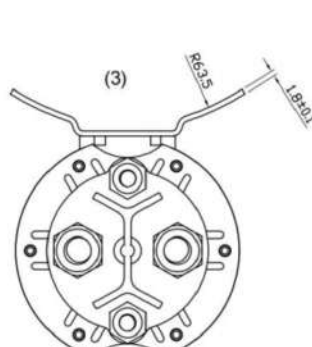
0.8KW Motor



1.6-2.2KW Motor



3KW Motor



Product Picture

HCM1-C1	HCM1-C2	Explain
		Ararc angle of the stent : 0.8KW motor with R40 radian bracket. 1.6KW to 2.2KW motor with R57 radian bracket. 3.0KW motor with R63 radian bracket. Distance of the stent mounting hole to the tip : The C1 stent was high. The C2 stent was short.
HCM1-Z1	HCM1-Z2	
		Distance of the stent mounting hole to the tip : The Z1 stent was high. The Z2 stent was short.
HCM1-V	HCM1-T	
		