





The image shows a long industrial machine in a factory setting, used for terminating heavy|mate M connectors. The machine is grey and features multiple modules with various cables and connectors. The text 'heavy|mate® M' is overlaid on the image. Below the text, there is a list of features. The machine has a control panel with buttons and a display. The background shows a clean industrial environment with other equipment and a cart.

# heavy|mate® M

- Modular connector
- More module slots than heavy|mate® F and market standard
- Rated voltage 63 - 1000 V
- Rated current 5 A ... 250 A
- Termination: crimp



Approvals, Testhouse	Characteristics	Approval-Number
VDE 	Characteristics see rated voltage and rated current of each module	56 79 ÜG
SEV 		
UL 		E 63093
CSA 		48932

In general approvals refer to representative versions of the connector series. Extent and specification of tests upon request.

## General information

- Modules inserts without crimp contacts, crimping tools see separate catalogue "Tools".
- Contacts must be ordered separately, processing instructions see catalogue "Tools".
- Connectors series heavy|mate® M may be engaged or disengaged when live but without electrical load. If these connectors are mated or unmated under load, the load shall be reduced to 10 % of rated current.

- We recommend using the high profile housings / hoods for the heavy|mate® M inserts.
- Empty modul spaces have to be filled with blind modules.
- Torque for PE connection 1.8 Nm

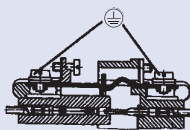


## Advantages of the system

- High combination possibilities
- Possibility of inverse configuration
- Rated voltage up to 1000 V
- Low cost

## First-to-mate last-to-break protective ground contact

Minimum wire size 0.5 mm<sup>2</sup>



## Modules



## Frames



## Range of housings





#### Requirements

- 3 x 400V; 50A; 6mm<sup>2</sup> wire gauge
- 8 x 250V; 8A; 1.5mm<sup>2</sup> wire gauge
- 5 x 400V; 15A; 4mm<sup>2</sup> wire gauge

#### Solution

##### 1. Check how 16 contacts can be realized; see modules overview on page 118

Possible selection:

- a) 1 x 20 contacts
- b) 2 x 10 contacts
- c) 1 x 10 contacts+ 1 x 5 contacts
- d) 1 x 3 contacts + 1 x 5 contacts + 1 x 10 contacts

##### 2. Check technical parameters / solution, see detail pages of the modules on page 126

Possible selection:

- a) not possible due to voltage
- b) not possible due to voltage
- c) not possible due to current
- d) POSSIBLE

##### 3. Choose matching contact, see detail page of the modules on page 126

Possible selection:

- a) 3 contacts = C146 A03 001 E8 → contacts = VN01 036 0002 1C
- b) 5 contacts = C146 A05 001 E8 → contacts = VN01 025 0033 1C
- c) 10 contacts = C146 A10 001 E8 → contacts = VN01 016 0027 1XC

##### 4. Choose matching frame, see frames on page 124

Solution: C146 P10 001 G8

##### 5. Choose matching housing, see housings from page 162

Solution: C146 21R010 600 8

#### Schematic construction

