

MD800 - Compact AC MultiDrive

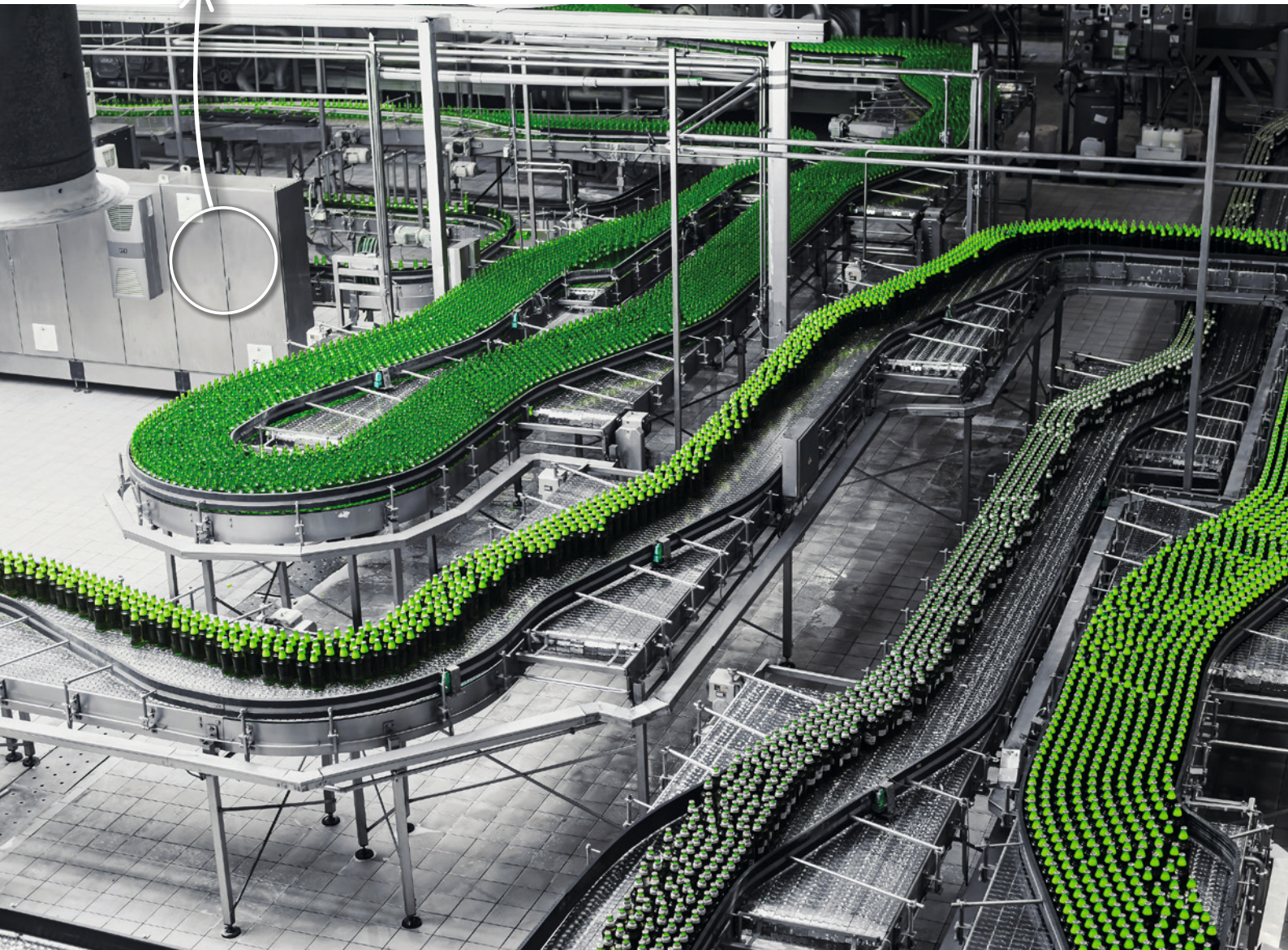
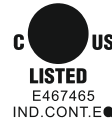
Comprehensive functionality in a compact footprint



- Modular design (from 1 to 8 drives)
- 1ph 200V and 3ph 400V supply
- Drive ratings: 200W to 7.5kW
- STOSIL3
- Choice of fieldbus protocols available



reddot winner 2021
innovative product



MD800 – features & functions



Comprehensive functionality:

- Individual STOSIL3 for each drive
- Suitable for open loop asynchronous & PM synchronous motors
- +24VDC control backup supply
- IP40 rated
- Remote LCD keypad (optional)
- Commissioning PC software available
- Dual rated: heavy duty (HD, Grating): 150% overload; normal duty (ND, Prating): 110% overload

High level, flexible connectivity:

- Built-in I/Os: 4DI, 4DO, 2AI, 1RO
- Standard on-board communications: USB commissioning port, CAN, RS485



- Two expansion slots
- I/O expansion cards
- Fieldbus option cards:



Reduced installation costs

- User-friendly pluggable connectors (spring type)
- Faster build time
- Reduced wiring
- User-friendly pluggable connectors (spring type)
- Fewer external components:
 - > Common EMC filter (C2 compliant)
 - > Input reactor
 - > Fuses/MCCBs
 - > Common built-in dynamic braking (variant)

Compact footprint for smaller cabinets

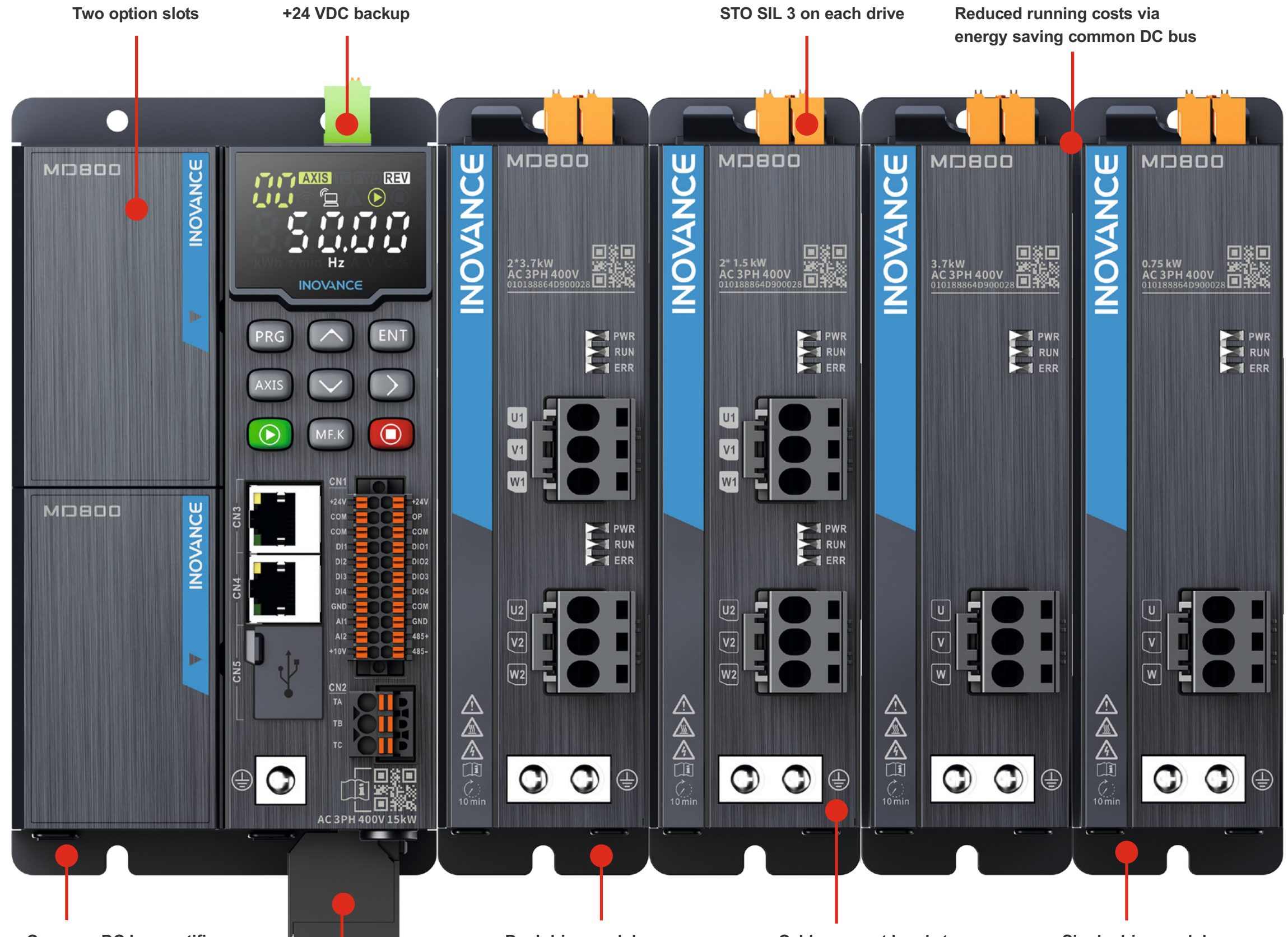
- Common height and depth: 182mm x 160mm
- Rectifier width: 99.5mm
- Drive width: 49.5mm

Designed for durability:

- High level conformal coating (3C3&3S2)
- Operating temperature: -20 to +60°C (de-rating > 50°C)
- Operating altitude: up to 4,000m (de-rating > 1,000m)
- Separate cooling channel for heatsink

This image is illustrated in its actual size: W 300 mm x H 182 mm

*In development



Common DC bus rectifier -
 400V(HD): 3.7-15kW
 400V(ND): 5.5-18.5kW
 200V(HD): 2.2-3.7kW
 200V(ND): 3-4.4kW

Mains input terminal and optional dynamic braking terminals

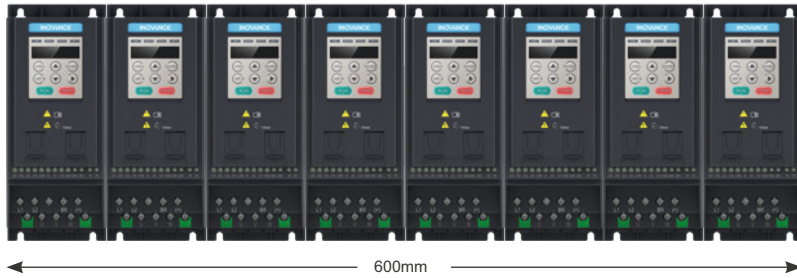
Dual drive modules -
 400V(HD): 0.4-3.7kW
 400V(ND): 0.75-5.5kW
 200V(HD): 0.2-2.2kW
 200V(ND): 0.4-3.7kW

Cable support bracket for EMC screen grounding (optional accessory)

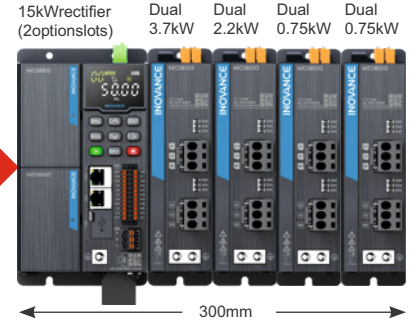
Single drive modules -
 400V(HD): 0.4-7.5kW
 400V(ND): 0.75-11kW
 200V(HD): 0.2-2.2kW
 200V(ND): 0.4-3.7kW

Designed for cabinet space saving - reduced installation costs

EightInovanceMD200drives,eachmodule' footprintis:W75mmxH180mm



Footprint reduction
-50%



Single drive units

| Power (kW) | | Part number | Model | Output AC current (A) | | STO function | |
|---------------------------------|------|-------------|----------------|-----------------------|------|--------------|----|
| HD | ND | | | HD | ND | | |
| 400V,DCsupplyvoltage:510-720VDC | | | | | | | |
| 0.4 | 0.75 | 0101B470 | MD800-1-4T1R8 | 1.8 | 2.1 | No | |
| 0.75 | 1.5 | 01019513 | MD800-1-4T3R4 | 3.4 | 4.6 | | |
| 1.5 | 2.2 | 0101B471 | MD800-1-4T4R8 | 4.8 | 5.4 | | |
| 2.2 | 3.7 | 01019514 | MD800-1-4T5R5 | 5.5 | 9 | | |
| 3.7 | 5.5 | 0101B472 | MD800-1-4T9R5 | 9.5 | 13 | | |
| 5.5 | 7.5 | 01019512 | MD800-1-4T13 | 13 | 17 | | |
| 7.5 | 11 | 01019506 | MD800-1-4T17 | 17 | 21 | Yes | |
| 0.4 | 0.75 | 0101B582 | MD800-1-4T1R8S | 1.8 | 2.1 | | |
| 0.75 | 1.5 | 0101B583 | MD800-1-4T3R4S | 3.4 | 4.6 | | |
| 1.5 | 2.2 | 0101B586 | MD800-1-4T4R8S | 4.8 | 5.4 | | |
| 2.2 | 3.7 | 0101B587 | MD800-1-4T5R5S | 5.5 | 9 | | |
| 3.7 | 5.5 | 0101B590 | MD800-1-4T9R5S | 9.5 | 13 | | |
| 5.5 | 7.5 | 0101B591 | MD800-1-4T13S | 13 | 17 | | |
| 7.5 | 11 | 0101B555 | MD800-1-4T17S | 17 | 21 | | |
| 200V,DCsupplyvoltage:270-360VDC | | | | | | | |
| 0.2 | 0.4 | 0101BA93 | MD800-1-2T1R7 | 1.7 | 1.9 | | No |
| 0.4 | 0.75 | 0101BA92 | MD800-1-2T3 | 3 | 3.5 | | |
| 0.75 | 1.5 | 0101BA91 | MD800-1-2T5 | 5 | 8 | | |
| 1.5 | 2.2 | 0101BA89 | MD800-1-2T8 | 8 | 9.6 | | |
| 2.2 | 3.7 | 0101BA88 | MD800-1-2T11 | 11 | 17.6 | Yes | |
| 0.2 | 0.4 | 0101BD16 | MD800-1-2T1R7S | 1.7 | 1.9 | | |
| 0.4 | 0.75 | 0101BA90 | MD800-1-2T3S | 3 | 3.5 | | |
| 0.75 | 1.5 | 0101B584 | MD800-1-2T5S | 5 | 8 | | |
| 1.5 | 2.2 | 0101BD17 | MD800-1-2T8S | 8 | 9.6 | | |
| 2.2 | 3.7 | 0101BA94 | MD800-1-2T11S | 11 | 17.6 | | |

Dual drive units

| Power (kW) | | Part number | Model | Output AC current (A) | | STO function |
|---------------------------------|------|-------------|----------------|-----------------------|------|--------------|
| HD | ND | | | HD | ND | |
| 400V,DCsupplyvoltage:510-720VDC | | | | | | |
| 0.4 | 0.75 | 0101B469 | MD800-2-4T1R8 | 1.8 | 2.1 | No |
| 0.75 | 1.5 | 01019509 | MD800-2-4T3R4 | 3.4 | 4.6 | |
| 1.5 | 2.2 | 0101AK33 | MD800-2-4T4R8 | 4.8 | 5.4 | |
| 2.2 | 3.7 | 01019510 | MD800-2-4T5R5 | 5.5 | 9 | |
| 3.7 | 5.5 | 01019511 | MD800-2-4T9R5 | 9.5 | 13 | |
| 5.5 | 7.5 | 01019512 | MD800-2-4T13 | 13 | 17 | |
| 0.4 | 0.75 | 0101B576 | MD800-2-4T1R8S | 1.8 | 2.1 | Yes |
| 0.75 | 1.5 | 0101B577 | MD800-2-4T3R4S | 3.4 | 4.6 | |
| 1.5 | 2.2 | 0101B579 | MD800-2-4T4R8S | 4.8 | 5.4 | |
| 2.2 | 3.7 | 0101B580 | MD800-2-4T5R5S | 5.5 | 9 | |
| 3.7 | 5.5 | 0101B554 | MD800-2-4T9R5S | 9.5 | 13 | |
| 5.5 | 7.5 | 01019512 | MD800-2-4T13 | 13 | 17 | |
| 200V,DCsupplyvoltage:270-360VDC | | | | | | |
| 0.2 | 0.4 | 0101BA86 | MD800-2-2T1R7 | 1.7 | 1.9 | No |
| 0.4 | 0.75 | 0101BA85 | MD800-2-2T3 | 3 | 3.5 | |
| 0.75 | 1.5 | 0101BA84 | MD800-2-2T5 | 5 | 8 | |
| 1.5 | 2.2 | 0101BA79 | MD800-2-2T8 | 8 | 9.6 | |
| 2.2 | 3.7 | 0101BA80 | MD800-2-2T11 | 11 | 17.6 | Yes |
| 0.2 | 0.4 | 0101BA83 | MD800-2-2T1R7S | 1.7 | 1.9 | |
| 0.4 | 0.75 | 0101B585 | MD800-2-2T3S | 3 | 3.5 | |
| 0.75 | 1.5 | 0101BD18 | MD800-2-2T5S | 5 | 8 | |
| 1.5 | 2.2 | 0101BD19 | MD800-2-2T8S | 8 | 9.6 | |
| 2.2 | 3.7 | 0101BA87 | MD800-2-2T11S | 11 | 17.6 | |

Accessories

| Part number | Model | Description |
|----------------|------------------|---|
| 01040124 | IO-M1 | I/Oexpansioncard:8DI,8DO,2AI |
| 01040123 | IO-R1 | Relayexpansioncard:8relayswith normallyopencontact |
| 01040122 | IO-R2 | Relayexpansioncard:4relayswith changeovercontact |
| 01040121 | SI-PN1 | PROFIBETcommunicationcard |
| 01040120 | SI-ECAT1 | EtherCATcommunicationcard |
| In development | SI-EN | EthernetIPcommunicationcard |
| In development | SI-EM | ModbusTCPcommunicationcard |
| 01040028/20 | SOP-20 | RemoteLCDkeypad(inc.3mcable) |
| 01040175 | MD800-PBJ100M-W1 | Rectifierunitcablesupportbracket |
| 01040176 | MD800-PBJ50M-W1 | Singleordualdriveunitcablesupportbracket |
| 01040169 | MD800-AZB1 | Mountingplateforeasyassemblyofan MD800setintheelectricalpanel |

*3ph400Vinputreactorsavailableonrequest(3%impedance)

Rectifier units

| Power (kW) | | Part number | Model | Built-in dynamic braking |
|----------------|------|-------------|---------------|--------------------------|
| HD | ND | | | |
| 3ph400VACinput | | | | |
| 3.7 | 5.5 | 0101B573 | MD800-0-4T12 | No |
| 7.5 | 11 | 0101B572 | MD800-0-4T22 | |
| 15 | 18.5 | 0101B571 | MD800-0-4T41 | |
| 3.7 | 5.5 | 0101AK34 | MD800-0-4T12B | Yes |
| 7.5 | 11 | 01019507 | MD800-0-4T22B | |
| 15 | 18.5 | 0101AH51 | MD800-0-4T41B | |
| 1ph200VACinput | | | | |
| 2.2 | 3 | 0101BA52 | MD800-0-2S24 | No |
| 3.7 | 4.4 | 0101B602 | MD800-0-2S40 | |
| 2.2 | 3 | 0101BA53 | MD800-0-2S24B | Yes |
| 3.7 | 4.4 | 0101B603 | MD800-0-2S40B | |

EMC Filters

| Category | Filter model | Matched rectifier model |
|-------------------------------|---------------|-------------------------|
| EMCfilters (ToachieveC2level) | FIL800-4T-045 | MD800-0-4T12* |
| | | MD800-0-4T22* |
| | FIL800-2S-045 | MD800-0-4T41* |
| | | MD800-0-2S24* |
| | | MD800-0-2S40* |