

Uninterruptible motor drive type UMD C100



Uninterruptible motor drive type UMD C100 is an uninterruptible drive system for three phase AC-motors from 2,2kW up to 22kW. Connects to battery systems 110 or 220VDC. Intended for applications where high availability is required, e.g. process industry, turbine plants and safety systems.

- **Highest availability** for drive systems in critical applications thanks to the possibility of both mains and battery operation.
- **Increased safety and minimized need for maintenance** because the starter and DC-motor are replaced by UMD C100 and a standard AC-motor. Quicker start compared to a DC-motor.
- **Uninterrupted transition** with full power between mains and battery operation.
- **Saves energy and battery capacity** thanks to the possibility of speed control.
- **Simple setting and distinct indication** of operation mode with advanced control panel.
- **Compact and robust design** leads to simple installation with minimal space requirements in all environments, in wall cabinets up to 7,5kW and in floor cabinets up to 22kW
- **Flexibility**
The drive has one or many outputs for operation of AC-motors and a common DC-feed. Each output consists of one frequency converter that gives flexibility to the drive system's need of control.

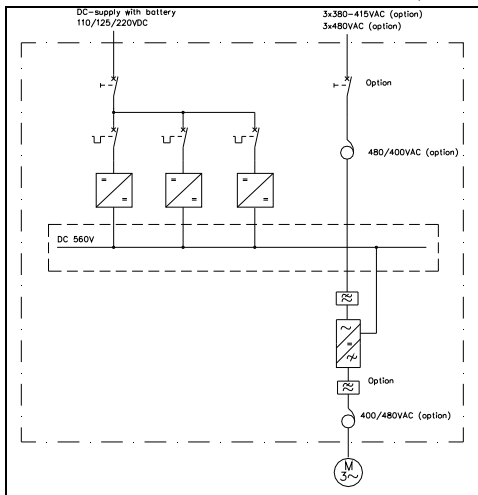
Uninterruptible motor drive type UMD C100

General

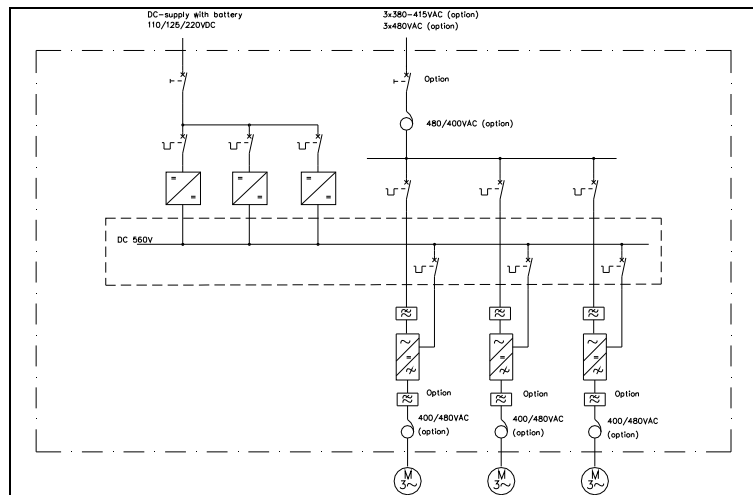
UMD C100 is intended together with an external DC system to provide uninterruptible motor drive. Typical applications are pumps and fans. UMD C100 is made in two designs depending on the DC systems voltage; 110/125VDC or 220VDC.

Output data		Input data			Input data AC (option)		Model designation	Cabinet	Size	Weight
Power	Current	Power	Current		Mains power	Current***	x=110V or 220V		HxBxD	
(kW/HP)	(A)	(kW)	(A)*	(A)**	(kVA)	(A)			(mm)	(kg)
2.2/3	5	3.1	33	16,5	5.5	7,8	UMD C100-2,2-x	Wall	1100x380x400	37
3/4	7	4.5	48	24	6.8	9,8	UMD C100-3-x	Wall	1100x380x400	37
4/5	9.5	6.1	66	33	8.4	12	UMD C100-4-x	Wall	1100x380x400	37
5.5/7.5	12	7.9	84	42	10.4	15	UMD C100-5,5-x	Wall	1100x380x400	44
7.5/10	16	10.6	114	57	13.9	20	UMD C100-7,5-x	Wall	1100x380x400	44
11/15	24	15.8	170	85	14.6	21	UMD C100-11-x	Floor	2100x700x600	
15/20	31	20.9	224	112	18.1	26	UMD C100-15-x	Floor	2100x700x600	
18.5/25	40	27.0	289	144,5	20.1	29	UMD C100-18,5-x	Floor	2100x700x600	
22/30	46	31.4	336	168	24.3	35	UMD C100-22-x	Floor	2100x700x600	

*Max. at 93,5VDC ** Max. at 187VDC ***At 3x400VAC



Single line diagram UMD C100 – single drive



Single line diagram UMD C100 – multi drive

Technical data

Cabinet

Type: Wall and floor cabinet
 Cable inlet: Floor: above and below
 Wall: below
 Colour: RAL 7035 light grey
 Class of enclosure: IP21
 Ventilation: Fans in frequency converter and DC/DC-converter otherwise natural convection

Environment

Ambient temperature: Operation, 0 to + 35 °C
 Storage, -40 to +70 °C
 Humidity: <90 % RH, non condensed

Altitude a.s.l.: <1000 m

Supply DC

Voltage: 110 VDC +/-15%
 220 VDC +/-15%
 Connection: Terminals
 Others: See table

Supply AC (option)

Frequency: 47 – 63 Hz
 Power factor: >0.95 at 400 VAC, full load
 Connection: Terminals
 Others: See table

Output AC

Type: Frequency converter
 Voltage, nominal: 3x400 VAC
 Connection: Terminals
 Others: See table

Disconnect switch

DC switch: In cabinet
 AC switch: In cabinet (AC-option)

Standards

Safety: EN 50178:1997
 EMC, immunity: EN/EC 61800-3:2004
 EMC, emission: EN/EC 61800-3:2004
 Battery installations: EN 50272-2

Operator interface:

Control signals: Start
 External error
 External indication: Ready
 Running
 Error
 Local control: Door mounted control panel
 Local indication: Door mounted control panel

Options

AC supply
 Thermistor relay
 Control of stand still heater
 Bus communication: PROFIBUS, CANopen, DeviceNet, EtherNet/IP, ModBus/TCP



The information in this document may be changed without notice



Kraftelektronik AB Phone +46 470-705200
 Verkstadsgatan 18 Fax +46 470-705201
 352 46 Växjö www.kraftelektronik.se
 Sweden