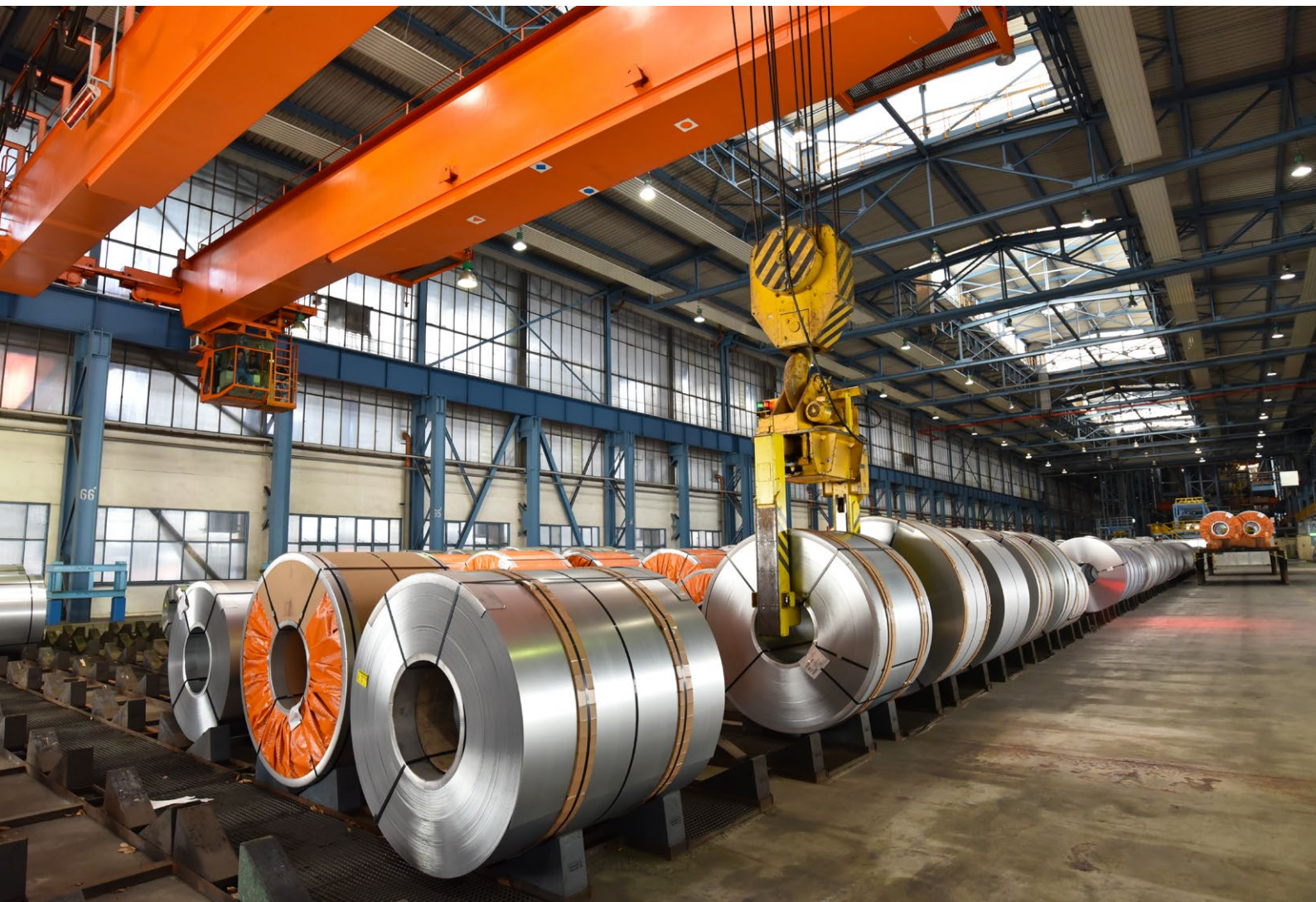


MD880 AC Drive

High-Performance AC Drive



- Wide operating voltage and product range:
3 ph 380–415 VAC, 3.7 to 2800 kW
3 ph 525–690 VAC; 55 to 5400 kW
- Rectifier type: basic rectifier, feedback rectifier, active front end
- AC asynchronous and PM synchronous motor control
- Excellent dynamic response
- Outstanding motor control performance
- Enhanced reliability: conformal coated PCBs compliant to 3S2 and 3C3 environments
- STO SIL 3



Structure and features of MD880 multi-drive system

Power supply module

Incoming line cabinet

Auxiliary cabinet

Instruments

- Voltmeter, ammeter
- Switch-on button, switch-off button, fault indicator
- Reset button, emergency stop button, remote/local switchover button

SOP-20-880 operating panel

Air circuit-breaker

- Max. breaking capacity reaching 100 kA, with comprehensive protective functions, easy installation, and high reliability



Bridging cabinet

- Used to connect two groups of cabinets with over-long width to realize common DC bus.

Drive cabinet

- High power density, covering 3.7 kW to 5600 kW

Fuse-type disconnecter Option

- Integrated with isolative and protective functions to support online maintenance of drive cabinet
- Adopting quick-acting fuse to trigger safety protector quickly and improve reliability

Power module

- Modular structure to maximize space utilization and reduce footprint
- Floor-mounting for high-power modules for easy maintenance

Note: We can provide well-assembled cabinets or standard power units as needed.

MD880 series products

Product ordering code



MD880 - 50M - XXXX - 4 - SG - N

① ② ③ ④ ⑤ ⑥

① MD880 AC drive series
MD880: Air-cooled
MD880LC: Water-cooled

② 20M: Basic power supply module
30M: Regenerative power supply module
40M: Active power supply module
50M: Drive module
60M: 3-PH braking module
61M: 1-PH braking module
80M: DCDC module

30F: Regenerative power supply filter module
40F: Active power supply filter module
30K: Regenerative power supply frame
40K: Active power supply frame
40D: Low-power active power supply (with filter system)
80D: DCDC (with output filter system)

③ XXXX : Rated current
(Rated power for 60M/61M series)

④ 4: 400 V
5: 500 V
7: 690 V

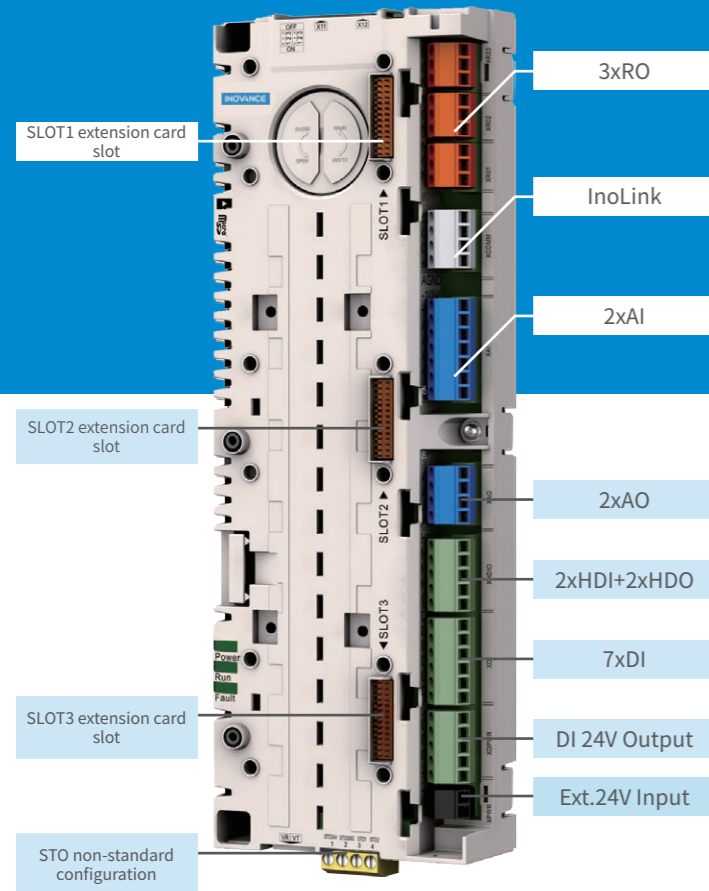
⑤ SG: 2nd generation of controller

⑥ N: H8A module without quick-plug structure or output reactor

MD880 multi-drive series power module

Item	Inverter module						Basic power supply module
Photo							
Frame size	H1-H3	H4	H6	H7	H8	H8A	T2
Power rating	380-415 V: H1: 3.7-11 kW H2: 15-22 kW H3: 30-45 kW	380-415 V: 55-90 kW	380-415 V: 110-132 kW 525-690 V: 55-160 kW	380-415 V: 160-200 kW 380-500 V: 250 kW 525-690 V: 200-250 kW	380-415 V: 250-500 kW 525-690 V: 315-710 kW	380-15 V: 250-500 kW 380-500 V: 400-560 kW 525-690 V: 315-710 kW	380-415 V: 475-649 kW 525-690 V: 650-929 kW
Function type	DC/AC drive module	DC/AC drive module	DC/AC drive module	DC/AC drive module	DC/AC drive module	DC/AC drive module	AC/DC drive module
Max. weight (kg)	11	20	35	45	130	80	188
Dimensions in mm (WxDxH)	100 x 413 x 415	200 x 413 x 415	180 x 438 x 770	180 x 463 x 920	230 x 582 x 1395	230 x 582 x 939	230 x 602 x 1393

Item	Active power supply frame units		Regenerative power supply frame units	
Photo				
Frame size	BLCL+H8	BLCL+2 x H8	L+H8	L+2 x H8
Power rating	380-415 V: 394-556 kW 380-500 V: 463-694 kW 525-690 V: 437-639 kW	380-415 V: 749-1056 kW 380-500 V: 880 kW 525-690 V: 829-1214 kW	380-415 V: 423-595 kW 525-690 V: 684-1026 kW	380-415 V: 787-1106 kW 525-690 V: 1272-1909 kW
Function type	AC/DC power supply module	AC/DC power supply module	AC/DC power supply module	AC/DC power supply module
Max. weight (kg)	460	650	320	480
Dimensions in mm (WxDxH)	631 x 624 x 1450	874 x 624 x 1450	631 x 624 x 1450	874 x 624 x 1450



The HCU control module, the master controller developed for MD880 series drives with single-drive or multi-drive systems, is mainly used to control basic power supply modules, regenerative power supply modules, active power supply modules, drive modules, and DCDC power modules. It features powerful functions, a compact structure, high extendability, high reliability, flexible networking, and excellent control algorithms. For use with drive units, the HCU control module supports synchronous and asynchronous motor control, V/f control, sensorless vector control, and feedback vector control. For use with DCDC modules, the HCU control module supports voltage control, current control, power control, and switchover among different control modes.

High performance

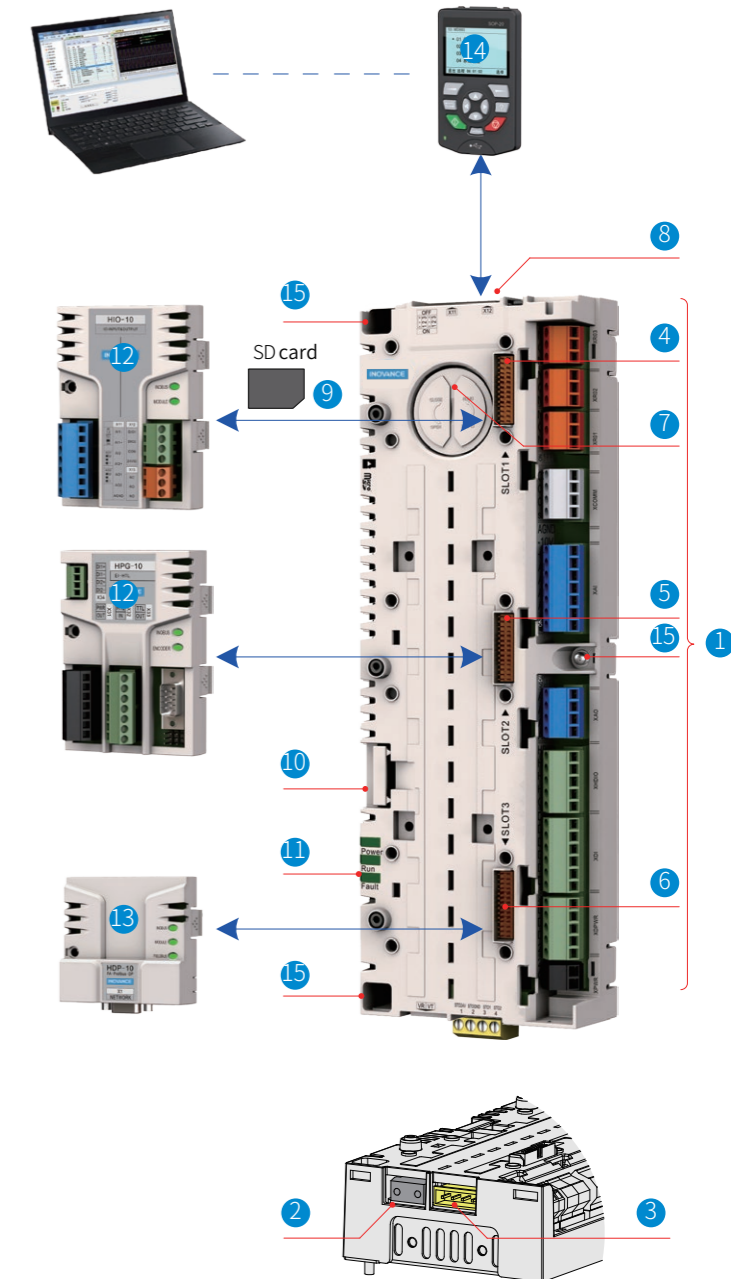
High reliability

HCU extension modules

Item	I/O extension modules	Encoder detection modules	Bus adapter modules
Photo			
Type	1. I/O extension module (2xDIO+2xAI+2xAO+1RO)	1. HTL incremental encoder detection module 2. Resolver detection module 3. TTL incremental encoder detection module 4. Sin/Cos encoder detection module	Fieldbus adapter modules 1. PROFIBUS-DP 2. CANopen 3. Modbus RTU Industrial Ethernet modules 1. PROFINET IO 2. Modbus TCP 3. EtherCAT Ethernet commissioning module 1. Ethernet commissioning module

Components of HCU control module

No.	Name	Description
1	User terminal	User I/O terminals are included as standard.
2	Communication optical fiber	Used as the optical fiber communication interface between HCU and power module.
3	STO terminal	Safe torque off (STO)
4	Slot 1	Extension module interface
5	Slot 2	Extension module interface
6	Slot 3	Extension module interface
7	Battery cover	RTC backup battery cover
8	Operating panel terminal	Two RJ45 terminals with the same assignment for easy cascading
9	SD card	Used as the standard memory of HCU, which can be inserted flexibly
10	Safety module slot	Used as the dedicated slot for functional safety module
11	Indicator	Indicates the state of the power supply, operation, and fault
12	Function module SIZE1	105 x 73 x 24 (mm)
13	Function module SIZE2	75 x 73 x 24 (mm)
14	Intelligent operating panel	SOP-20-880
15	Fixing hole	Three fixing holes for HCU



MD880 series products

Control system and function module options

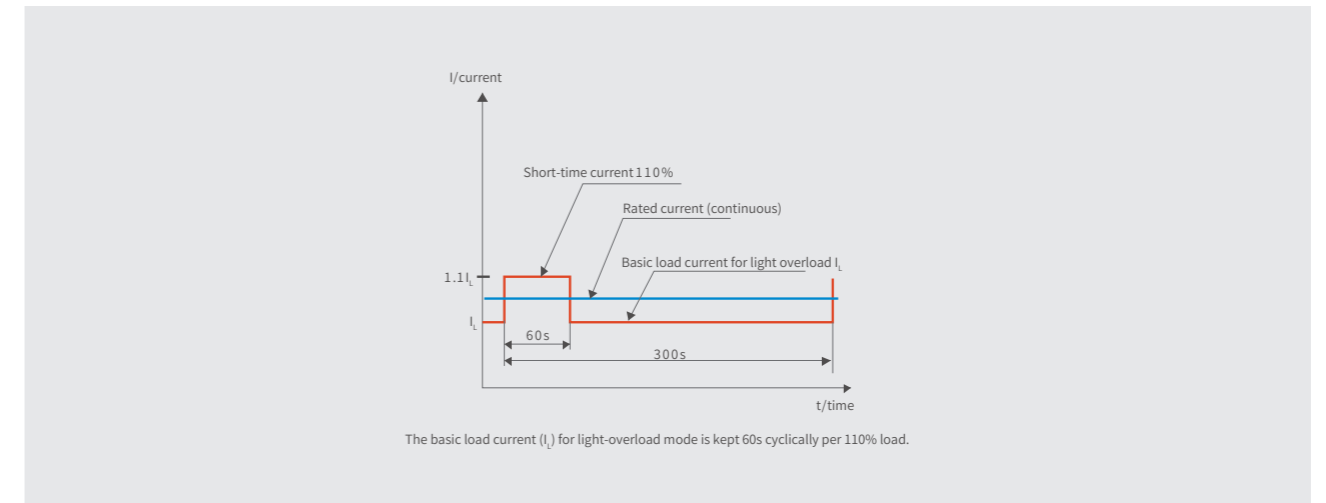
No.	Name	Model	Description
1	Control module	HCU-20	Basic power supply control module
		HCU-30	Regenerative power supply control module
		HCU-40	Active power supply control module
		HCU-50S	2nd generation of drive control module
		HCU-60	Three-phase braking control module
		HCU-80	DC chopper control module
2	Paralleled-module control module	HPCU-40	2 to 4 paralleled modules supported
		HPCU-60	2 to 6 paralleled modules supported
		HPCU-A0	2 to 10 paralleled modules supported
3	Function extension module	HESD-10	Extension of 1 slot supported
4	Voltage/Current detection module	HSVM-10	Three-phase AC input voltage detection
		HSVM-20	Voltage/Current detection module (1-channel voltage and 2-channel current supported)
		HSVM-30	Voltage/Current detection module (2-channel voltage and 2-channel current supported)
5	Encoder detection module	HPG-10	HTL incremental differential, single-ended, OC or OE encoder detection, frequency-division output
		HPG-30	Sin/Cos encoder detection module
		HPG-40	Resolver detection
		HPG-50	TTL incremental OC or differential encoder detection, frequency-division output
6	Inobus optical fiber extension module	HOFM-10	1 pair of 50 M optical fiber extension module
		HOFM-30	3 pairs of 50 M optical fiber extension module
7	Intelligent operating panel	SOP-20-880	Operating panel for commissioning and monitoring
8	Fieldbus adapter module	HCAN-10	CANopen fieldbus adapter
		HMBA-10	Modbus RTU fieldbus adapter
		HDP-10	PROFIBUS-DP fieldbus adapter
9	Industrial Ethernet module	HPFN-10	PROFINET IO industrial Ethernet
		HMBT-10	Modbus TCP industrial Ethernet
		HETC-10	EtherCAT industrial Ethernet
10	Ethernet commissioning module	HETN-10	Ethernet commissioning module
11	Optical fiber router module	HOFR-50	Information exchange of 2 to 5 HCU controllers (master/slave communication achieved through optical fibers)
12	I/O extension module	HIO-10	2 AIs; 2 AO2; 2 DI0s; 1 relay output
13	Process data collection module	HIBA-10	PDA collection module
14	Remote service gateway	HGW-10	Centralized monitoring module

Comprehensive technical data for MD880

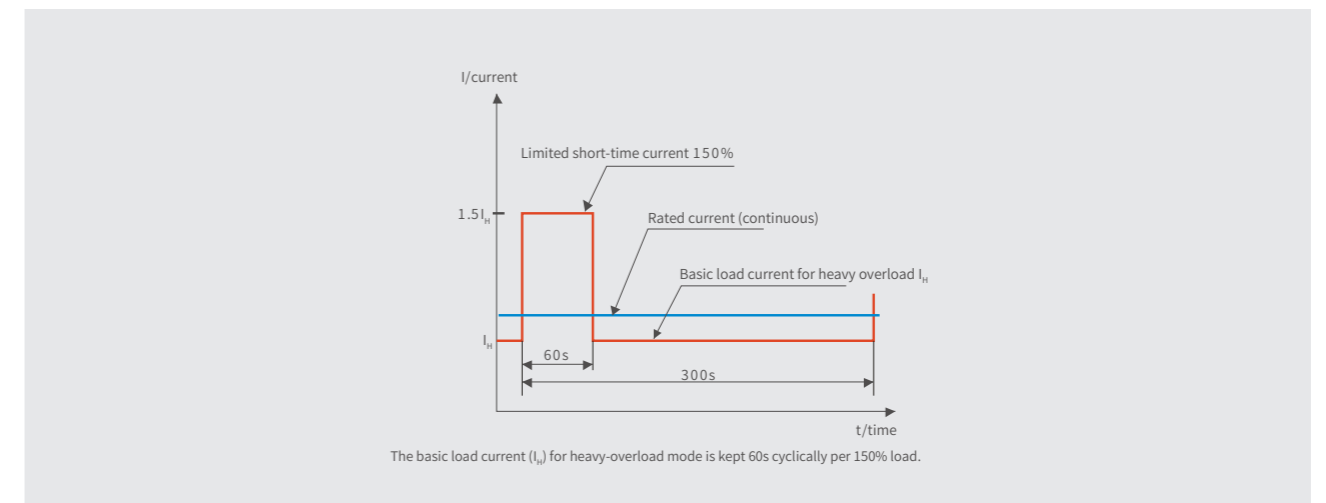
	Item	Description
Basic power supply module	Input voltage	4: 380–415 VAC, 7: 525–690 VAC; -10% to +10% (-15%, < 1 min)
	Input frequency range	47–63 Hz
	Output voltage	4: 540–590 VDC, 7: 740–975 VDC
	Overload capacity	Light overload: Continuous operation of 1 min allowed for 110% x rated load every 5 min; Heavy overload: Continuous operation of 1 min allowed for 150% x rated load every 5 min
	Operating efficiency	Higher than 98%
	Fundamental power factor	Higher than 0.95 (full load at rated values)
Regenerative power supply module	Input voltage	4: 380–415 VAC; 7: 525–690 VAC; -10% to +10% (-15%, < 1 min)
	Input frequency range	47–63 Hz
	Output voltage	4: 540–590 VDC; 7: 740–975 VDC
	Overload capacity	Light overload: Continuous operation of 1 min allowed for 110% x rated load every 5 min; Heavy overload: Continuous operation of 1 min allowed for 150% x rated load every 5 min
	Operating efficiency	Higher than 98%
	Fundamental power factor	Higher than 0.95 (full load at rated values)
Active power supply module	Input voltage	4: 380–415 VAC; 5: 380–500 VAC; 7: 525–690 VAC; -10% to +10% (-15%, < 1 min)
	Input frequency range	47–63 Hz
	Output voltage	4: 540–720 VDC; 5: 570–750 VDC; 7: 740–975 VDC
	Overload capacity	Light overload: Continuous operation of 1 min allowed for 110% x rated load every 5 min; Heavy overload: Continuous operation of 1 min allowed for 150% x rated load every 5 min
	Operating efficiency	Higher than 97%
	Fundamental power factor	Higher than 0.99 (full load at rated values)
	Input harmonic current	THDI < 5% (rated power); THDU < 5% (Rzc > 20)
Drive module/Single-drive	Input voltage	Multi-drive: 4: 540–720 VDC; 5: 540–750 VDC; 7: 740–975 VDC Single-drive: 4: 380–480 VAC; 7: 525–690 VAC
	Output voltage	Multi-drive: 4: 0–415 VAC; 5: 0–500 VAC; 7: 0–690 VAC; Single-drive: 4: 0–480 VAC; 7: 0–690 VAC
	Output frequency	0–300 Hz (Contact Inovance for frequencies higher than 300 Hz.)
	Operating efficiency	Higher than 98%
	Motor control mode	V/f, SVC, FVC
	Speed regulation range	V/f: 1:50; SVC: 1:200; FVC: 1:1000
	Speed control precision	SVC: ±10%; Fs (slip rate); FVC: ±0.01%
	Torque response	Open-loop: 5 ms; closed-loop: 3 ms
	Torque control mode	Sensorless vector control; feedback vector control
	Starting torque	0.5 Hz/150% (SVC); 0 Hz/200% (FVC)
	Overload capacity	Light overload: Continuous operation of 1 min allowed for 110% x rated load every 5 min; Heavy overload: Continuous operation of 1 min allowed for 150% x rated load every 5 min

Item	Description	
DCDC	Voltage on high voltage side	4: 540-720 V; 5: 540-850 V; 7: 740-1050 V
	Voltage on the low voltage side	4: 24-670 V; 5: 24-800 V; 7: 24-1000 V
	Voltage accuracy	Low-voltage side $\leq 0.1\%$ Fs; High-voltage side $\leq 1\%$ Fs
	Current accuracy	$\leq 1\%$ Fs
	Response time	≤ 3 ms (response time for increasing from 10% to 90% of rated current)
	Switchover time	≤ 6 ms (response time for changing from +90% to -90% of rated current)
	Overall efficiency	$\geq 97\%$
	Overload capacity	Quick overload: $200\% I_{fast}$ 10s overload for every 60s Heavy-overload: a minute of operation at 150% of rated current ($150\% I_{H}$) allowed every 5 minutes
Connection	Analog input	Two AIs: -10 V to +10 V or -20 mA to +20 mA (selected through jumper)
	Analog output	Two AOs: 0 V to 10 V or 0 mA to 20 mA (selected through jumper)
	Digital input	Seven DIs: NPN/PNP; "0" < 5; "1" > 15, Rin: 2 k Ω
	High-speed digital input	Two high-speed DIs: NPN/PNP; "0" < 5; "1" > 15; Rin: 2 k Ω 24 V logic level, input frequency < 100 kHz
	High-speed digital output	Two high-speed DOs: OC; max. input voltage: 30 VDC; 24 V logic level, output frequency < 100 kHz
	Relay output	Three relay outputs; NO or NC output; 250 VAC/30 VDC, 2 A
	Intelligent operating panel or PC	Interface mode: Dual-RJ45 interface; physical layer: EIA-485; master-slave mode; max. communication rate: 4 Mbps
	Safety function	Safe torque off (optional)
Ambient condition	Inolink communication	Physical layer: EIA-485; max. communication rate: 5 Mbps
	Ambient temperature	-10°C to +40°C (non-frosting); derating required for temperatures between 40°C and 50°C
	Ambient humidity	5% to 95% (without condensation)
Mechanical data	Mounting altitude	Derating is not required for altitudes not higher than 1000 m. For altitudes higher than 1000 m, derate 1% for every additional 100 m. The maximum altitude is 4000 m. An isolation transformer is needed on the input side for altitudes higher than 2000 m.
	Vibration resistance	Compliant with Class 3M4 in GB/T4798.3
	IP rating	Module: IP00; Cabinet: IP21 IP23 and IP43 are optional.
	Safety performance	Compliant with EN 61800-5-1
	Cooling mode	AF (forced air cooling) compliant with EN 60146

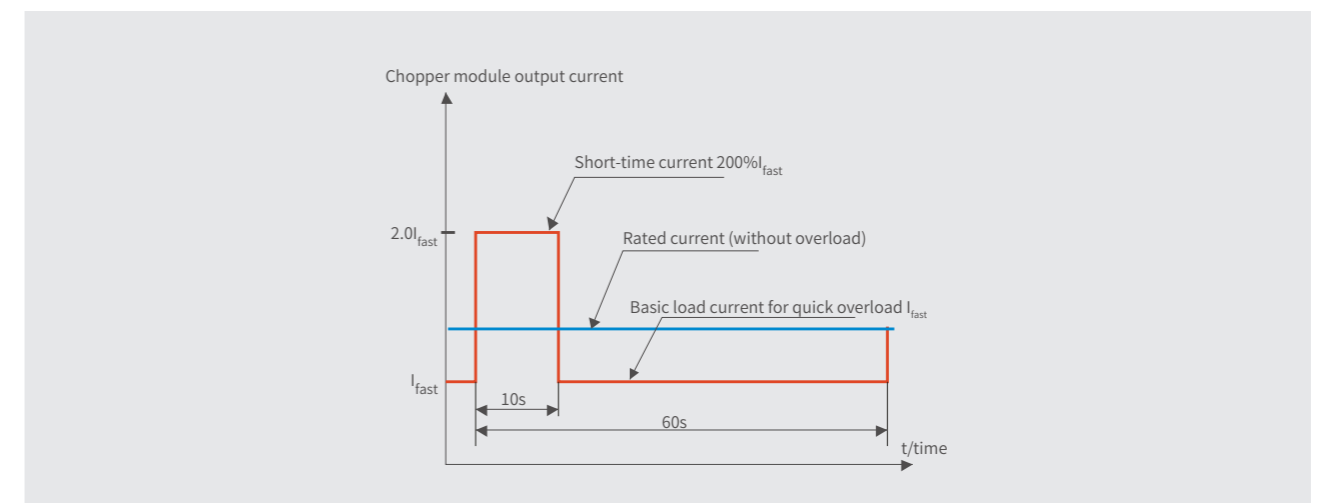
Light-overload curve



Heavy-overload curve



DCDC quick overload curve



Technical data of MD880 series multi-drive products

MD880-20 series basic power supply module

UN = 400 V (380–415 V), ±10% (-15%, < 1 min) at 400 V rated power											
Model MD880-20...	Normal duty without overload					Light-overload application		Heavy-overload application		Power loss (kW)	Frame size
	I _N A(AC)	I _N A(DC)	I _{Max} A(DC)	S _N kVA	P _N kW(DC)	I _{Ld} A(DC)	P _{Ld} kW(DC)	I _{Hd} A(DC)	P _{Hd} kW(DC)		
6 pulse waves											
0718-4	718	879	1142	497	475	844	456	659	356	3.52	T2
0982-4	982	1202	1562	680	649	1154	623	901	487	5.12	T2
1336-4	1336	1635	2126	926	883	1570	848	1226	662	7.04	2 x T2
1826-4	1826	2235	2905	1265	1207	2146	1159	1676	905	10.24	2 x T2
2739-4	2739	3352	4358	1898	1810	3218	1738	2514	1358	15.36	3 x T2
3651-4	3651	4469	5809	2529	2413	4290	2317	3351	1810	20.48	4 x T2
4564-4	4564	5586	7262	3162	3016	5363	2896	4190	2262	25.6	5 x T2
5477-4	5477	6704	8715	3794	3620	6435	3475	5028	2715	30.72	6 x T2
12 pulse waves											
1336-4	1336	1635	2126	926	883	1570	848	1226	662	7.04	2 x T2
1826-4	1826	2235	2905	1265	1207	2146	1159	1676	905	10.24	2 x T2
2674-4	2674	3273	4255	1853	1767	3142	1697	2455	1325	14.08	4 x T2
3651-4	3651	4469	5809	2529	2413	4290	2317	3351	1810	20.48	4 x T2
4008-4	4008	4906	6377	2777	2649	4709	2543	3679	1987	21.12	6 x T2
5477-4	5477	6704	8715	3794	3620	6435	3475	5028	2715	30.72	6 x T2

UN = 690 V (525–690 V), ±10% (-15%, < 1 min) at 690 V rated power											
Model MD880-20...	Normal duty without overload					Light-overload application		Heavy-overload application		Power loss (kW)	Frame size
	I _N A(AC)	I _N A(DC)	I _{Max} A(DC)	S _N kVA	P _N kW(DC)	I _{Ld} A(DC)	P _{Ld} kW(DC)	I _{Hd} A(DC)	P _{Hd} kW(DC)		
6 pulse waves											
0570-7	570	698	907	681	650	670	624	523	487	2.96	T2
0815-7	815	998	1297	974	929	958	892	748	697	4.32	T2
1061-7	1061	1299	1688	1268	1210	1247	1161	974	907	5.92	2 x T2
1515-7	1515	1854	2411	1811	1727	1780	1658	1391	1295	8.64	2 x T2
2273-7	2273	2782	3617	2716	2591	2671	2488	2087	1944	12.96	3 x T2
3031-7	3031	3710	4823	3622	3456	3561	3317	2782	2592	17.28	4 x T2
3788-7	3788	4636	6027	4527	4319	4451	4146	3477	3239	21.6	5 x T2
4546-7	4546	5564	7233	5433	5183	5341	4976	4173	3887	25.92	6 x T2
12 pulse waves											
1061-7	1061	1299	1688	1268	1210	1247	1161	974	907	5.92	2 x T2
1515-7	1515	1854	2411	1811	1727	1780	1658	1391	1295	8.64	2 x T2
2122-7	2122	2597	3376	2536	2419	2493	2323	1948	1814	11.84	4 x T2
3031-7	3031	3710	4823	3622	3456	3561	3317	2782	2592	17.28	4 x T2
4546-7	4546	5564	7233	5433	5183	5341	4976	4173	3887	25.92	6 x T2

Technical data of MD880 series multi-drive products

MD880-30 series regenerative power supply module

UN = 400 V (380–415 V), ±10% (-15%, < 1 min) at 400 V rated power											
Model MD880-30...	Normal duty without overload					Light-overload application		Heavy-overload application		Power loss (kW)	Frame size
	I _N A(AC)	I _N A(DC)	I _{Max} A(DC)	S _N kVA	P _N kW(DC)	I _{Ld} A(DC)	P _{Ld} kW(DC)	I _{Hd} A(DC)	P _{Hd} kW(DC)		
0640-4	640	783	1018	443	423	752	406	587	317	7.9	L+H8
0900-4	900	1102	1432	624	595	1057	571	826	446	12	L+H8
1190-4	1190	1457	1894	825	787	1399	755	1093	590	14.1	L+2 x H8
1674-4	1674	2049	2664	1160	1106	1967	1062	1537	830	22.4	L+2 x H8
2380-4	2380	2913	3787	1649	1573	2796	1510	2185	1180	28.2	2 x (L+2 x H8)
3348-4	3348	4098	5327	2319	2213	3934	2124	3073	1660	44.8	2 x (L+2 x H8)
5022-4	5022	6147	7991	3479	3319	5901	3186	4610	2489	67.2	3 x (L+2 x H8)

UN = 690 V (525–690 V), ±10% (-15%, < 1 min) at 690 V rated power											
Model MD880-30...	Normal duty without overload					Light-overload application		Heavy-overload application		Power loss (kW)	Frame size
	I _N A(AC)	I _N A(DC)	I _{Max} A(DC)	S _N kVA	P _N kW(DC)	I _{Ld} A(DC)	P _{Ld} kW(DC)	I _{Hd} A(DC)	P _{Hd} kW(DC)		
0600-7	0600	734	955	717	684	705	657	551	513	9.2	L+H8
0900-7	0900	1102	1432	1076	1026	1057	985	826	770	13.1	L+H8
1116-7	1116	1366	1776	1334	1272	1311	1221	1024	954	16.5	L+2 x H8
1674-7	1674	2049	2664	2001	1909	1967	1832	1537	1431	24.4	L+2 x H8
2232-7	2232	2732	3551	2667	2545	2623	2443	2049	1909	33	2 x (L+2 x H8)
3348-7	3348	4098	5327	4001	3817	3934	3664	3073	2863	48.8	2 x (L+2 x H8)
5022-7	5022	6147	7991	6002	5726	5901	5497	4610	4294	73.2	3 x (L+2 x H8)

※Note: Data in the preceding table are for reference only.

Technical data of MD880 series multi-drive products

MD880-40 series active power supply module

UN = 400 V (380–415 V), ±10% (-15%, <1min) at 400 V rated power											
Model MD880-40...	Normal duty without overload					Light-overload application		Heavy-overload application		Power loss (kW)	Frame size
	I _N	I _N	I _{Max}	S _N	P _N	I _{Ld}	P _{Ld}	I _{Hd}	P _{Hd}		
	A(AC)	A(DC)	A(DC)	kVA	kW(DC)	A(DC)	kW(DC)	A(DC)	kW(DC)		
0094-4	94	107	140	65	64	103	62	81	48	1.6	LCL+H3
0149-4	149	170	221	103	102	164	98	128	77	2.55	LCL+H4
0183-4	183	209	272	127	126	201	120	157	94	3.15	LCL+H4
0299-4	299	342	444	207	205	328	197	256	154	5.12	LCL+H6
0395-4	395	452	587	274	271	433	260	339	203	6.77	LCL+H7
0575-4	575	657	854	398	394	631	379	493	296	10.7	BLCL+H8
0810-4	810	926	1204	561	556	889	533	694	417	15.5	BLCL+H8
1092-4	1092	1248	1623	757	749	1198	719	936	562	20.3	BLCL+2 x H8
1539-4	1539	1759	2287	1066	1056	1689	1013	1319	792	29.5	BLCL+2 x H8
2185-4	2185	2498	3247	1514	1499	2398	1439	1873	1124	40.6	2 x (BLCL+2 x H8)
3078-4	3078	3519	4574	2132	2111	3378	2027	2639	1583	58.9	2 x (BLCL+2 x H8)
4617-4	4617	5278	6861	3199	3167	5067	3040	3958	2375	88.4	3 x (BLCL+2 x H8)

UN = 500 V (380–500 V), ±10% (-15%, < 1 min) at 500 V rated power											
Model MD880-40...	Normal duty without overload					Light-overload application		Heavy-overload application		Outline dimensions	
	I _N	I _N	I _{Max}	S _N	P _N	I _{Ld}	P _{Ld}	I _{Hd}	P _{Hd}		
	A (AC)	A (DC)	A (DC)	kVA	kW	A(DC)	kW(DC)	A(DC)	kW(DC)		
0540-5	540	617	802	468	463	593	444	463	347	BLCL+H8	
0810-5	810	926	1204	701	694	889	667	694	521	BLCL+H8	
1026-5	1026	1172	1524	889	880	1127	844	879	659	BLCL+2H8	

UN = 690 V (525–690 V), ±10% (-15%, < 1 min) at 690 V rated power											
Model MD880-40...	Normal duty without overload					Light-overload application		Heavy-overload application		Power Loss (kW)	Frame size
	I _N	I _N	I _{Max}	S _N	P _N	I _{Ld}	P _{Ld}	I _{Hd}	P _{Hd}		
	A(AC)	A(DC)	A(DC)	kVA	kW(DC)	A(DC)	kW(DC)	A(DC)	kW(DC)		
0369-7	0369	422	548	441	437	405	419	316	327	12.4	BLCL+H8
0540-7	0540	617	802	645	639	593	613	463	479	16.5	BLCL+H8
0701-7	0701	801	1042	838	829	769	796	601	622	23.6	BLCL+2 x H8
1026-7	1026	1173	1525	1226	1214	1126	1165	880	910	31.4	BLCL+2 x H8
1402-7	1402	1603	2083	1676	1659	1539	1592	1202	1244	47.2	2 x (BLCL+2 x H8)
2052-7	2052	2346	3049	2452	2428	2252	2331	1759	1821	62.8	2 x (BLCL+2 x H8)
3078-7	3078	3519	4574	3678	3642	3378	3496	2639	2731	94.2	3 x (BLCL+2 x H8)
4104-7	4104	4691	6099	4905	4856	4504	4661	3519	3642	126	4 x (BLCL+2 x H8)
5130-7	5130	5864	7632	6131	6069	5630	5827	4398	4552	157	5 x (BLCL+2 x H8)

※Note: Data in the preceding table are for reference only.

Technical data of MD880 series multi-drive products

MD880-50 series drive module

UN = 400 V (380–415 V), ±10% (-15%, < 1 min) at 400 V rated power										
Model MD880-50...	Normal duty without overload			Light-overload application		Heavy-overload application		Power loss (W)	Frame size	
	I _N	I _{Max}	P _N	I _{Ld}	P _{Ld}	I _{Hd}	P _{Hd}			
	A(AC)	A(AC)	kW(AC)	A(AC)	kW(AC)	A(AC)	kW(AC)			
0009-4-SG	9	11	3.7	9	3.7	5.1	2.2	100.0	H1	
0013-4-SG	13	15.6	5.5	13	5.5	9	3.7	136.0	H1	
0017-4-SG	17	21	7.5	17	7.5	13	5.5	168.0	H1	
0023-4-SG	23	27	11	22	11	17	7.5	190.0	H1	
0033-4-SG	33	40	15	32	15	25	11	290	H2	
0038-4-SG	38	51	18.5	37	18.5	32	15	308	H2	
0048-4-SG	48	59	22	45	22	37	18.5	401	H2	
0060-4-SG	60	72	30	58	30	45	22	502	H3	
0078-4-SG	78	96	37	75	37	60	30	592	H3	
0094-4-SG	94	120	45	91	45	75	37	735	H3	
0116-4-SG	116	146	55	112	55	91	45	762	H4	
0149-4-SG	149	179	75	143	75	112	55	1150	H4	
0183-4-SG	183	240	90	176	90	150	75	1468	H4	
0245-4-SG	245	294	110	236	110	184	90	1758	H6	
0299-4-SG	299	358	132	287	132	224	110	2104	H6	
0349-4-SG	349	419	160	335	160	262	132	2587	H7	
0395-4-SG	395	486	200	380	200	296	160	3203	H7	
0516-4-SG-(N)	516	619	250	495	250	387	200	4921	H8 (H8A)	
0639-4-SG-(N)	639	766	355	613	315	479	250	6701	H8 (H8A)	
0757-4-SG-(N)	757	909	400	727	400	568	315	7960	H8 (H8A)	
0900-4-SG-(N)	900	1080	500	864	450	675	355	10133	H8 (H8A)	
1213-4-SG-(N)	1213	1456	630	1165	630	910	500	13402	2 x H8 (2 x H8A)	
1439-4-SG-(N)	1439	1727	800	1381	800	1079	630	15920	2 x H8 (2 x H8A)	
1710-4-SG-(N)	1710	2052	1000	1642	900	1283	710	20266	2 x H8 (2 x H8A)	
2158-4-SG-(N)	2158	2590	1200	2072	1200	1619	900	23880	3 x H8 (3 x H8A)	
2565-4-SG-(N)	2565	3078	1400	2072	1400	1924	1000	30399	3 x H8 (3 x H8A)	
3420-4-SG-(N)	3420	4104	1800	3283	1800	2565	1400	40532	4 x H8 (4 x H8A)	
4275-4-SG-(N)	4275	5130	2400	4104	2000	3206	1800	50665	5 x H8 (5 x H8A)	
5130-4-SG-(N)	5130	6156	2800	4925	2400	3848	2000	60798	6 x H8 (6 x H8A)	

UN = 500 V (380–500 V), ±10% (-15%, < 1 min) at 500 V rated power										
Model MD880-50...	Normal duty without overload				Light-overload application		Heavy-overload application		Outline dimensions	
	I _N	I _N	I _{max}	P _N	I _{Ld}	P _{Ld}	I _{Ld}	P _{Ld}		
	A (AC)	A (DC)	A (DC)	kW(DC)	A(AC)	kW(AC)	A(AC)	kW(AC)		
0349-5-SG	349	386	454	250	335	200	262	160	H7	
0590-5-SG-(N)	590	653	767	400	566	355	443	250	H8A	
0810-5-SG-(N)	810	886	1053	560	778	500	608	400	H8A	

Technical data of MD880 series multi-drive products

MD880-50 series drive module

UN: Three-phase 690 VAC (range: 525–690 VAC)									
Model MD880-50...	Rated value			Light-overload application		Heavy-overload application		Power loss (W)	Frame size
	I _N	I _{Max}	P _N	I _{Ld}	P _{Ld}	I _{Hd}	P _{Hd}		
	A(AC)	A(AC)	kW(AC)	A(AC)	kW(AC)	A(AC)	kW(AC)		
0062-7-SG	62	74	55	60	55	46	45	798	H6
0082-7-SG	82	98	75	79	75	61	55	1163	H6
0099-7-SG	99	119	90	95	90	74	75	1321	H6
0125-7-SG	125	150	110	120	110	94	90	1494	H6
0144-7-SG	144	173	132	138	132	108	110	1788	H6
0192-7-SG	192	230	160	184	160	144	132	2436	H6
0217-7-SG	217	260	200	215	200	162	160	2724	H7
0270-7-SG	270	324	250	260	250	202	200	3342	H7
0340-7-SG-(N)	340	408	315	326	315	255	250	5109	H8(H8A)
0410-7-SG-(N)	410	492	400	394	355	308	315	6143	H8(H8A)
0530-7-SG-(N)	530	636	500	509	450	398	355	7912	H8(H8A)
0600-7-SG-(N)	600	720	560	576	560	450	400	9086	H8(H8A)
0650-7-SG-(N)	650	780	630	624	560	488	450	10080	H8(H8A)
0721-7-SG-(N)	721	865	710	692	630	541	560	11000	H8(H8A)
0779-7-SG-(N)	779	935	800	748	710	584	560	12286	2 x H8 (2 x H8A)
1007-7-SG-(N)	1007	1208	1000	967	900	755	710	15824	2 x H8 (2 x H8A)
1140-7-SG-(N)	1140	1368	1100	1094	1000	855	800	18172	2 x H8 (2 x H8A)
1235-7-SG-(N)	1235	1482	1200	1186	1100	926	900	20160	2 x H8 (2 x H8A)
1370-7-SG-(N)	1370	1644	1300	1315	1200	1027	1000	22000	2 x H8 (2 x H8A)
1510-7-SG-(N)	1510	1812	1400	1450	1400	1133	1100	23736	3 x H8 (3 x H8A)
1710-7-SG-(N)	1710	2052	1600	1642	1600	1283	1200	27258	3 x H8 (3 x H8A)
1853-7-SG-(N)	1853	2223	1800	1778	1700	1389	1300	30240	3 x H8 (3 x H8A)
2055-7-SG-(N)	2055	2466	2000	1973	1900	1541	1500	33000	3 x H8 (3 x H8A)
2280-7-SG-(N)	2280	2736	2000	2189	2000	1710	1600	36344	4 x H8 (4 x H8A)
2470-7-SG-(N)	2470	2964	2400	2371	2300	1853	1800	40320	4 x H8 (4 x H8A)
2740-7-SG-(N)	2740	3288	2700	2630	2600	2055	2000	44000	4 x H8 (4 x H8A)
3088-7-SG-(N)	3088	3705	3000	2964	2900	2316	2300	50400	5 x H8 (5 x H8A)
3425-7-SG-(N)	3425	4110	3400	3288	3200	2569	2500	55000	5 x H8 (5 x H8A)
3705-7-SG-(N)	3705	4446	3600	3557	3500	2779	2700	60480	6 x H8 (6 x H8A)
4110-7-SG-(N)	4110	4932	4000	3945	3900	3082	3000	66000	6 x H8 (6 x H8A)
4323-7-SG-(N)	4323	5187	4300	4150	4100	3242	3200	70560	7 x H8 (7 x H8A)
4795-7-SG-(N)	4795	5754	4700	4603	4500	3596	3500	77000	7 x H8 (7 x H8A)
4940-7-SG-(N)	4940	5928	4900	4742	4700	3705	3600	80640	8 x H8 (8 x H8A)
5480-7-SG-(N)	5480	6576	5400	5260	5200	4110	4000	88000	8 x H8 (8 x H8A)

Technical data of MD880 series multi-drive products

MD880-60 series three-phase braking module

Model MD880-60...	Resistance of braking unit (Single-phase)		Braking threshold U _{br}	Without overload			Cyclic overload (1 min/5 min)		
				I _{dc}	I _{rms}	P	I _{dc}	I _{rms}	P
	Ω		V	A(DC)	A(AC)	kW	A(DC)	A(AC)	kW
0500-4	R _{min}	1.7	653	781	310	500	999	351	640
	R _{max}	2.1		781	282	500	827	291	530
0750-4	R _{min}	1.2		1171	465	750	1499	527	960
	R _{max}	1.4		1171	424	750	1241	436	800
0870-7	R _{min}	3.0	1126	781	310	870	999	351	1110
	R _{max}	3.6		781	283	870	833	293	920
1300-7	R _{min}	2.0		1171	465	1300	1499	527	1660
	R _{max}	2.4		1171	425	1300	1249	439	1390

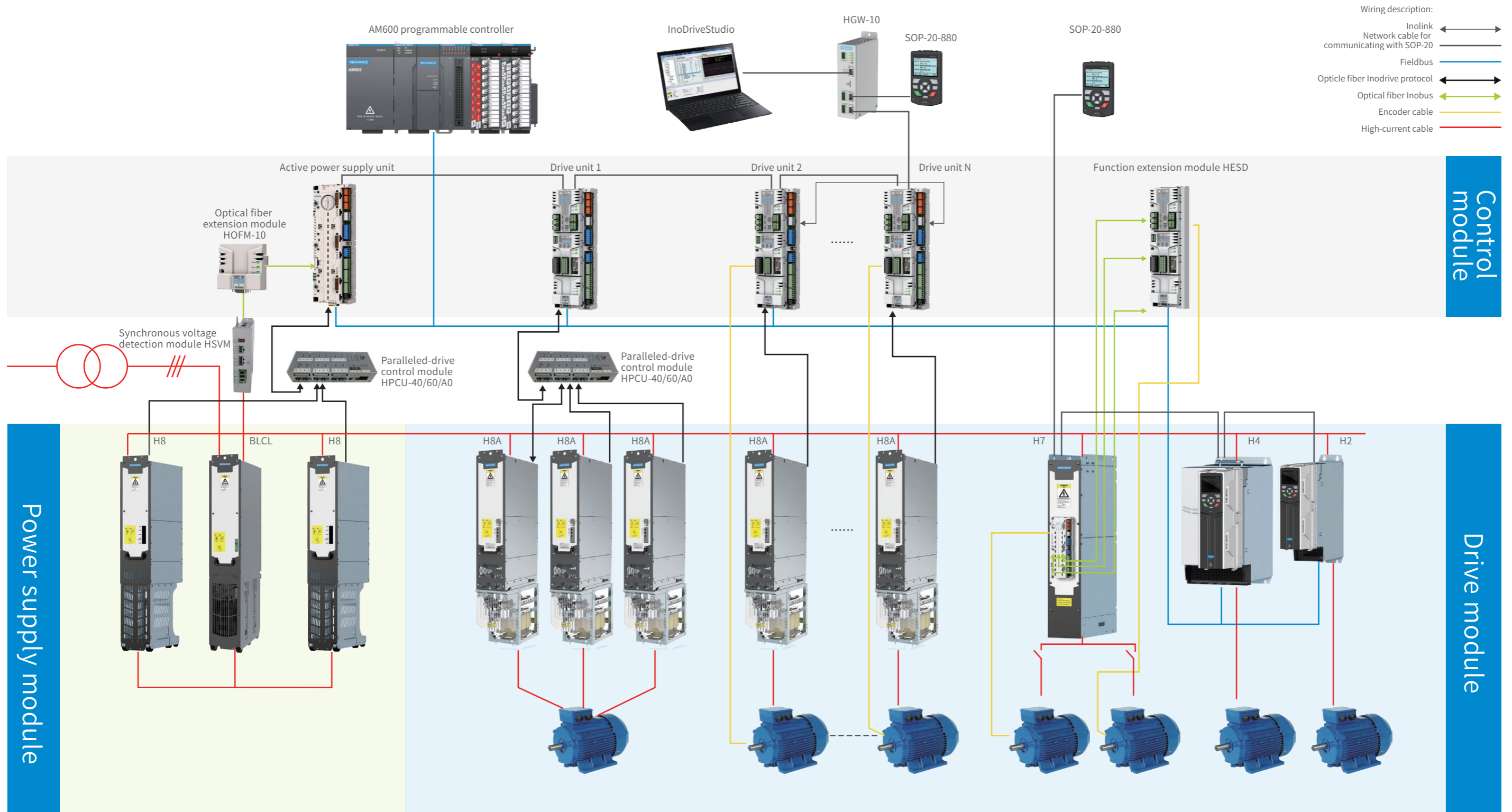
MD880-61M single-phase braking module

Model MD880-61...	Resistance of braking unit (Single-phase)		Braking threshold U _{br}	Without overload		Cyclic overload (1 min/5 min)		Quick overload (10s/60s)	
				I _{rms}	P _{cont}	I _{rms}	P _{br}	I _{rms}	P _{br}
	Ω		V	A(AC)	kW	A(AC)	kW	A(AC)	kW
0400-7	R _{min}	2.72	1126	131	147	267	298	361	404

MD880-80 series DCDC

Model MD880-80...	Voltage			Rated value		Quick overload (10s/60s)			Heavy-overload application (1 min/5 min)		Power loss (W)	Frame size
	V _I	V _O	V _{O,nom}	I _N	P _N	I _{fast}	I _{max}	P _{fast}	I _{Hd}	P _{Hd}		
	V(DC)	V(DC)	V(DC)	A(DC)	kW	A(DC)	A(DC)	kW	A(DC)	kW		
0100-4	540–720	24–670	500	100	50	75	150	38	85	43	592	H3+LC
0200-4	540–720	24–670	500	200	100	150	300	75	170	85	762	H4+LC
0300-4	540–720	24–670	500	300	150	225	450	113	255	128	1468	H4+LC
0400-4	540–720	24–670	500	400	200	300	600	150	340	170	2104	H6+LC
0500-4	540–720	24–670	500	500	250	375	750	188	425	213	2587	H7+LC
0600-4	540–720	24–670	500	600	300	450	900	225	510	255	3203	H7+LC
0800-4	540–720	24–670	500	800	400	600	1200	300	680	340	4921	H8A+LC
1000-4	540–720	24–670	500	1000	500	750	1500	375	850	425	6701	H8A+LC
0600-5	540–850	24–800	500	600	300	450	900	225	510	255	3203	H7+LC
0100-7	740–1050	24–1000	1000	100	100	75	150	75	85	85	1321	H6+LC
0200-7	740–1050	24–1000	1000	200	200	150	300	150	170	170	2436	H6+LC
0300-7	740–1050	24–1000	1000	300	300	225	450	225	255	255	5109	H8A+LC
0400-7	740–1050	24–1000	1000	400	400	300	600	300	340	340	6143	H8A+LC
0500-7	740–1050	24–1000	1000	500	500	375	750	375	425	425	7912	H8A+LC
0600-7	740–1050	24–1000	1000	600	600	450	900	450	510	510	9086	H8A+LC

Topology of MD880 multi-drive system



Driven by technology

AC drives



AC MultiDrives



MV drives



Single-Axis servos



Multi-Axis servos



Robotics & motion controllers



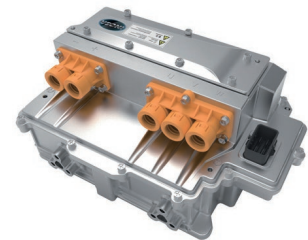
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