automation
by INOVANCE technology

Part Ⅰ
Marketing

MD880

High Performance Multi-axes AC Drive

PMTS Eric Weng 1790
Jan,2018
Version 1.0

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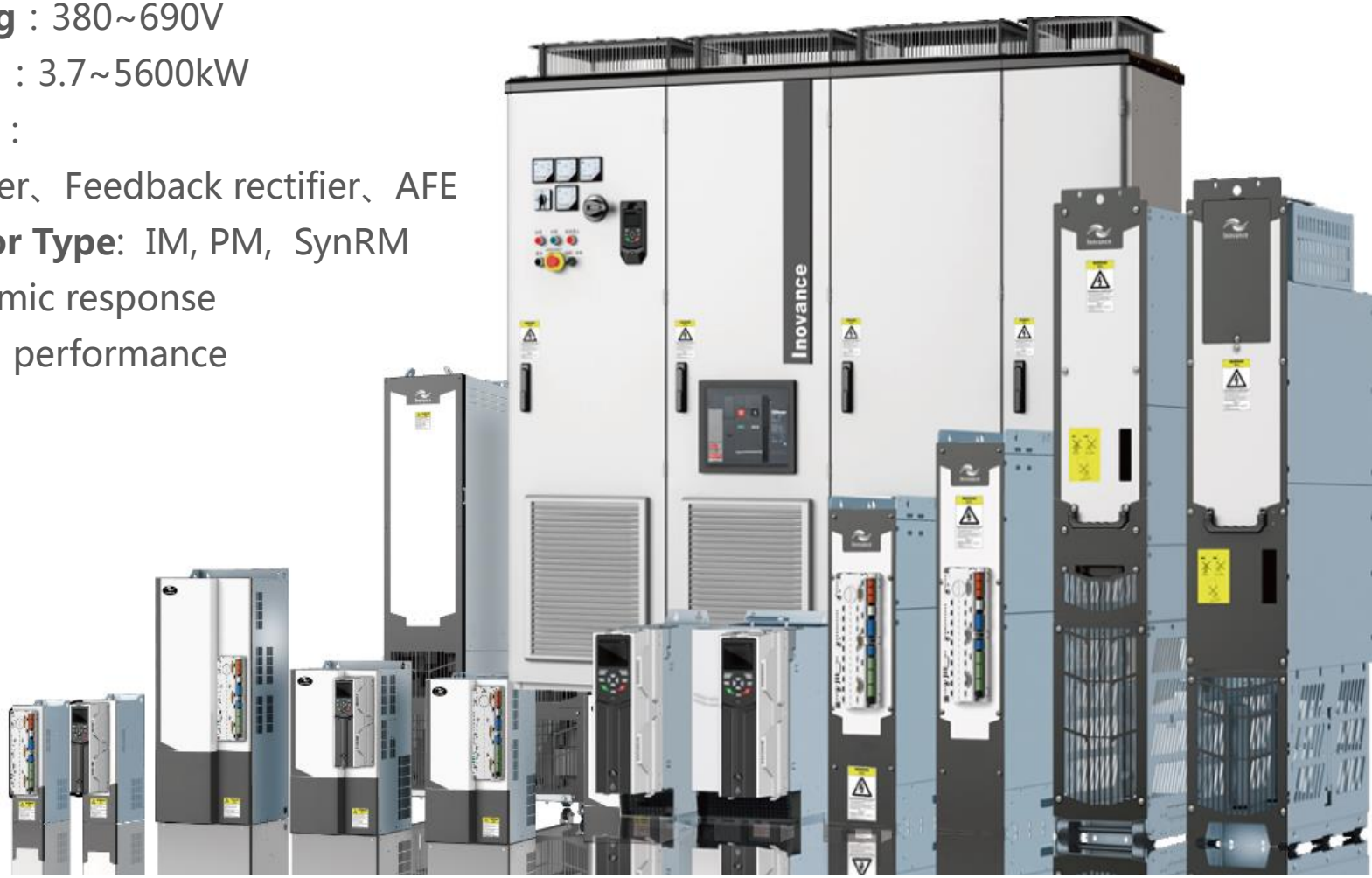
Product Strategy

1.1 Product Overview

- **Voltage Rating**：380~690V
- **Power Rating** ：3.7~5600kW
- **Rectifier Type**：
  Basic Rectifier、Feedback rectifier、AFE
- **Support Motor Type**: IM, PM, SynRM
- Excellent dynamic response
- Precise control performance



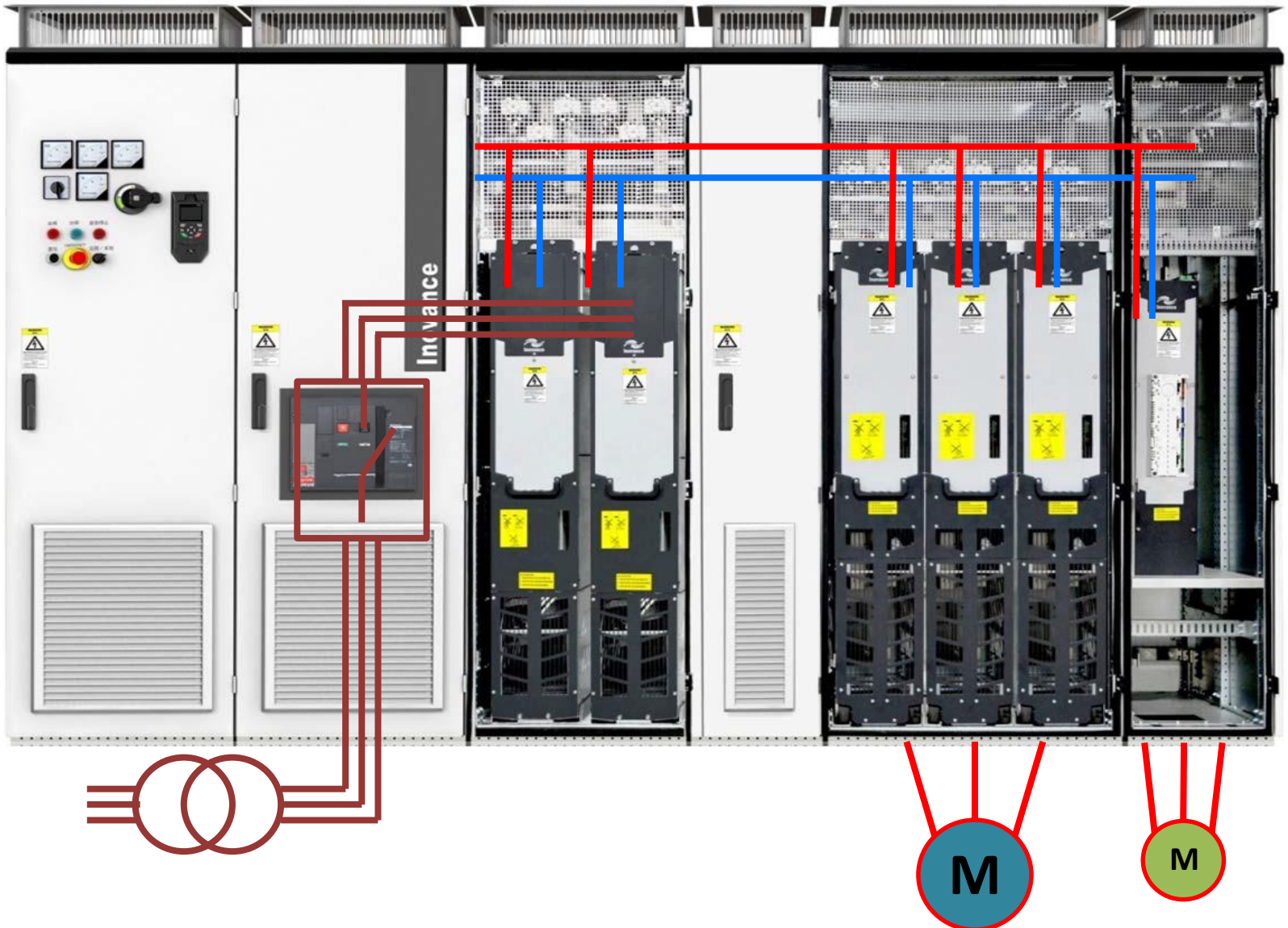
Product Strategy

1.1 Product Overview

- **Modules and cabinet can be offered independently，flexible configuration**

Product Strategy

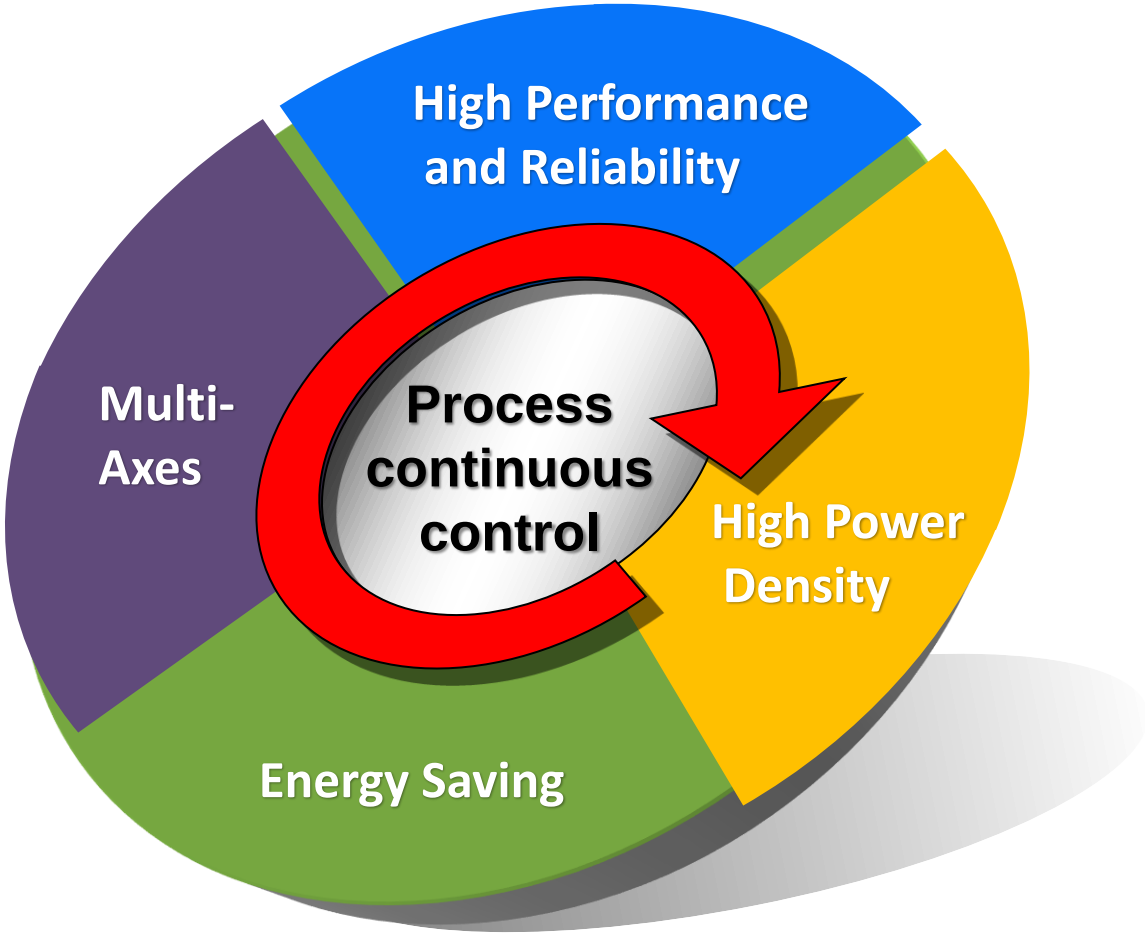
Auxiliary Cabinet | Power Supply Inlet cables Cabinet | Rectifier Cabinet | Inverter Cabinet



Product Strategy

1.1 Product Overview

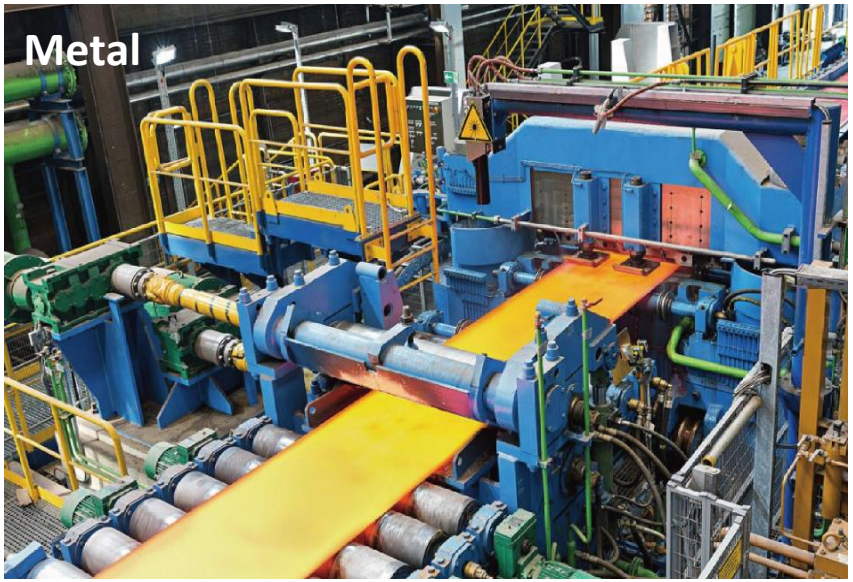
Product positioning of this product:



Product Strategy

1.1 Product Overview

Main Serve Industries:



Product Strategy

1.1 Product Overview

Module-Nameplate & Designation Rule

MD880 50M 0900 4 X - INT

Mark	Product Series
MD880	MD880 series

Mark	Applicable Motor
20M	Basic Rectifier unit
30M	Feedback rectifier unit
40M	AFE rectifier
50M	Inverter unit
60M	Brake unit

Mark	Version
INT	International Variant

Mark	Accessory
X	Option

Mark	Rated voltage
4	400V
5	500V
7	690V

Mark	Rated Current
0900	900A

Product Strategy

1.1 Product Overview

Cabinet-Nameplate & Designation Rule

MD880 50C 0900 4 X - INT

Mark	Product Series
MD880	MD880 series

Mark	Applicable Motor
11C	Basic Rectifier power supply line cabinet
12C	Feedback rectifier power supply line cabinet
13C	AFE rectifier power supply line cabinet
20C	Basic Rectifier cabinet
30C	Feedback rectifier cabinet
40C	AFE rectifier cabinet
50C	Inverter unit cabinet
60C	Brake unit cabinet

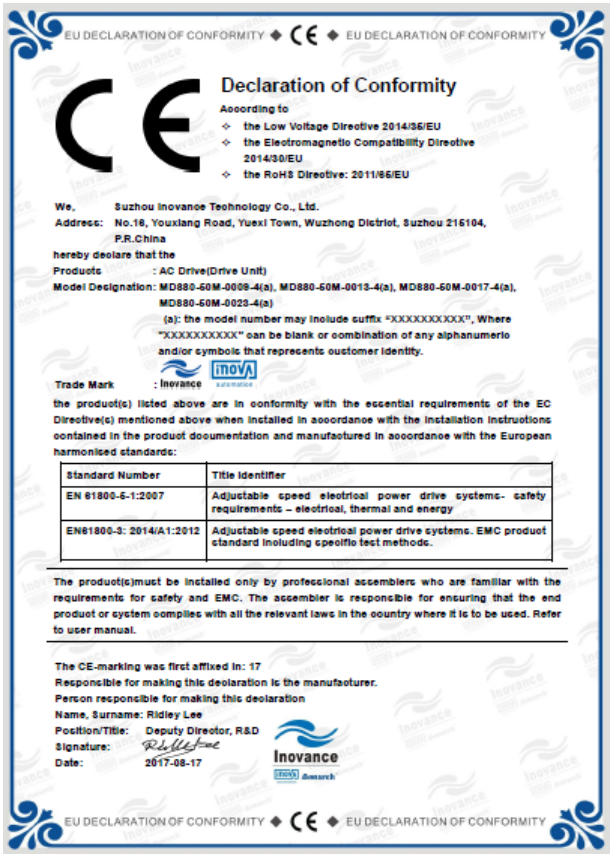
Mark	Version
INT	International Variant

Mark	Accessory
X	Option

Mark	Rated voltage
4	400V
5	500V
7	690V

Mark	Rated Current
0900	900A

1.2 Certificate Of Compliance



EU DECLARATION OF CONFORMITY ◆ CE ◆ EU DECLARATION OF CONFORMITY

Declaration of Conformity

Aoocording to
- the Low Voltage Directive 2014/35/EU
- the Electromagnetic Compatibility Directive 2014/30/EU
- the RoHS Directive: 2011/65/EU

We, Suzhou Inovance Technology Co., Ltd.
Address: No.16, Youxiang Road, Yuexi Town, Wuzhong District, Suzhou 216104, P.R.China
hereby declare that the
Produots : AC Drive(Drive Unit)
Model Designation: MD880-50M-0009-4(a), MD880-50M-0013-4(a), MD880-50M-0017-4(a), MD880-50M-0023-4(a)
(a): the model number may include suffix "XXXXXXXXXX", Where "XXXXXXXXXX" can be blank or combination of any alphanumeric and/or symbols that represents customer identity.
Trade Mark : Inovance

the product(s) listed above are in conformity with the essential requirements of the EC Directive(s) mentioned above when installed in aoocordance with the installation instruotions contained in the product documentation and manufaotured in aoocordanoe with the European harmonised standards:

Standard Number	Title identifier
EN 61800-5-1:2007	Adjustable speed electrical power drive systems- safety requirements – electrical, thermal and energy
EN61800-3: 2014/A1:2012	Adjustable speed electrical power drive systems. EMC product standard including specific test methods.

The product(s)must be installed only by professional assemblers who are familiar with the requirements for safety and EMC. The assembler is responsible for ensuring that the end product or system complies with all the relevant laws in the country where it is to be used. Refer to user manual.

The CE-marking was first affixed in: 17
Responsible for making this declaration is the manufaoturer.
Person responsible for making this declaration
Name, Surname: Ridley Lee
Position/Title: Deputy Direotor, R&D
Signature:
Date: 2017-08-17

Inovance

EU DECLARATION OF CONFORMITY ◆ CE ◆ EU DECLARATION OF CONFORMITY

ZERTIFIKAT ◆ CERTIFICATE ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

Attestation of Conformity
No. E8A 17 09 80658 162

Product Service

Holder of Certificate: Suzhou Inovance Technology Co., Ltd.
No.16, Youxiang Road, Yuexi Town, Wuzhong District
215104 Suzhou
PEOPLE'S REPUBLIC OF CHINA

Name of Object: Electronic frequency converter [AC Servo Drive (Drive Unit)]

Model(s): MD880-50M-0009-4(a), MD880-50M-0013-4(a), MD880-50M-0017-4(a), MD880-50M-0023-4(a), MD880-50M-0033-4(a), MD880-50M-0038-4(a), MD880-50M-0048-4(a), MD880-50M-0060-4(a), MD880-50M-0078-4(a), MD880-50M-0094-4(a), MD880-50M-0116-4(a), MD880-50M-0149-4(a), MD880-50M-0183-4(a)
(See page 2 for details of model description)

Description of Object: Rated Input : See page 2 for details
Rated Output : See page 2 for details

Tested according to: EN 61800-3:2004/A1:2012

This Attestation of Conformity is issued on a voluntary basis according to the Directive 2014/30/EU relating to electromagnetic compatibility. It confirms that the listed apparatus complies with all essential requirements of the directive and is based on the technical specifications applicable at the time of issuance. It refers only to the particular sample submitted for testing and certification. See also notes overleaf.

Test report no.: 687601749801

Date, 2017-09-18 (Paul Yu)

After preparation of the necessary technical documentation as well as the EU declaration of conformity the required CE marking can be affixed on the product. That declaration of conformity is issued under the sole responsibility of the manufacturer. Other relevant EU-directives have to be observed.

Page 1 of 2

TÜV SÜD Product Service GmbH · Zertifizierstelle · Ridlerstraße 65 · 80339 München · Germany

ZERTIFIKAT ◆ CERTIFICATE ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

Attestation of Conformity
No. N8A 17 07 80658 149

Product Service

Holder of Certificate: Suzhou Inovance Technology Co., Ltd.
No.16, Youxiang Road, Yuexi Town, Wuzhong District
215104 Suzhou
PEOPLE'S REPUBLIC OF CHINA

Product: Electronic frequency converter [AC Drive/AC Servo Drive (Drive Unit)]

This Attestation of Conformity is issued on a voluntary basis according to the Low Voltage Directive 2014/35/EU relating to electrical equipment designed for use within certain voltage limits. It confirms that the listed equipment complies with the principal protection requirements of the directive and is based on the technical specifications applicable at the time of issuance. It refers only to the particular sample submitted for testing and certification. See also notes overleaf.

Test report no.: 682301700801

Date, 2017-07-27 (Alex Kong)

After preparation of the necessary technical documentation as well as the EU conformity declaration the required CE marking can be affixed on the product. That declaration of conformity is issued under the sole responsibility of the manufacturer. Other relevant EU-directives have to be observed.

Page 1 of 3

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- **H1~H4 (7.5-90kW) is avaiable,others are pending**

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2. Power Rating Module

- 2.1 Frame size
- 2.2 Module Introduction
- 2.3 Specifications

Power Rating Range

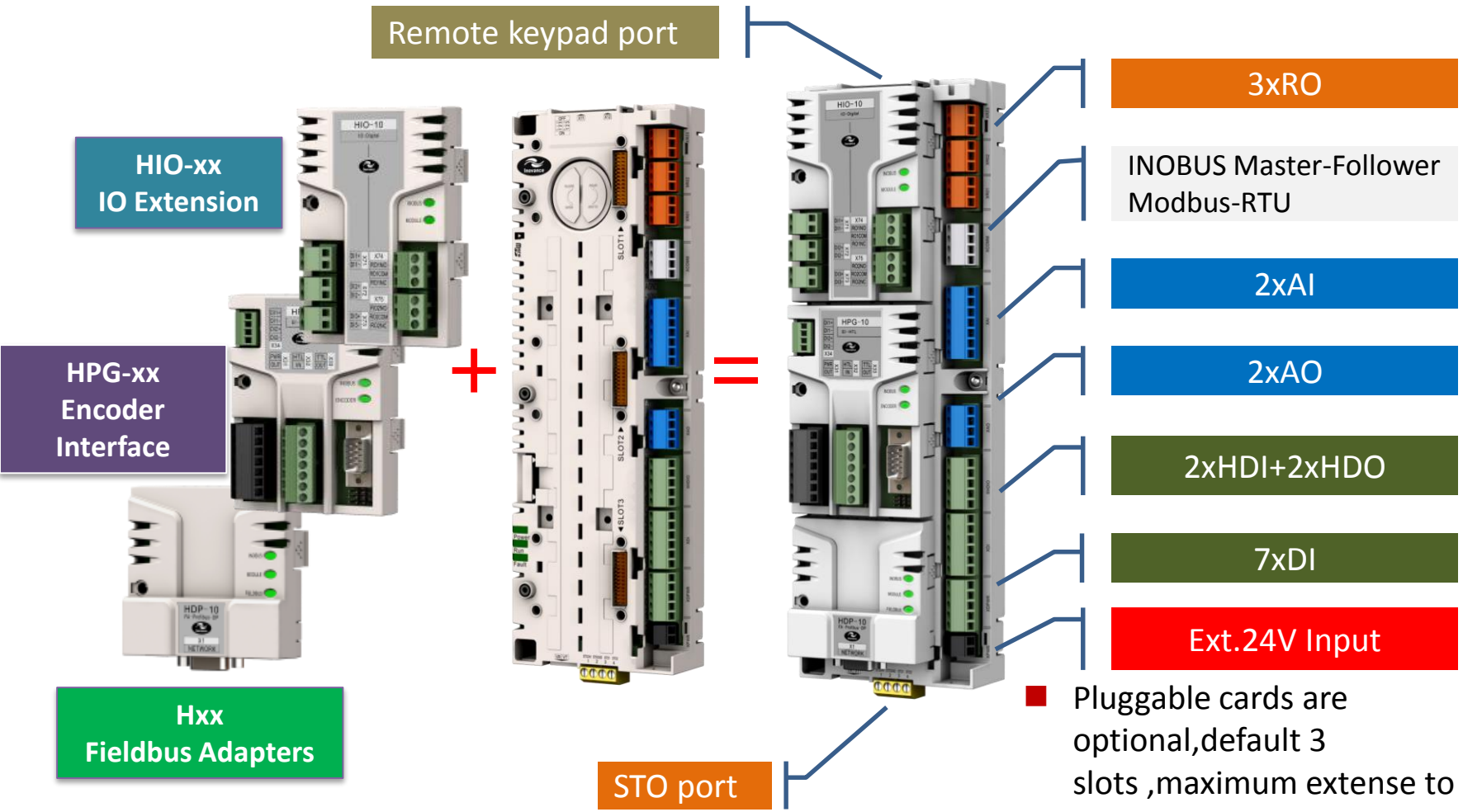
2.1 Frame Size

MD880 Power Module

Inverter Unit/AFE Unit					Basic Rectifier Unit
					
H1 ~ H3	**H4**	**H6**	**H7**	**H8**	**T2**
■ 380V : H1: 7.5 ~ 11 kW H2: 15 ~ 30 kW H3: 37 ~ 45 kW	■ 380V: 55 ~ 90 kW	■ 380V : 110 ~ 132 kW ■ 690V: 55 ~ 160 kW	■ 380V : 160 ~ 200 kW ■ 690V: 200 ~ 250 kW	■ 380V : 250 ~ 500 kW ■ 690V: 315 ~ 560 kW	■ 380V : 473 ~ 647 kW ■ 690V: 651 ~ 929 kW

2.2 Module Introduction

MD880 HCU- High Performance Controller

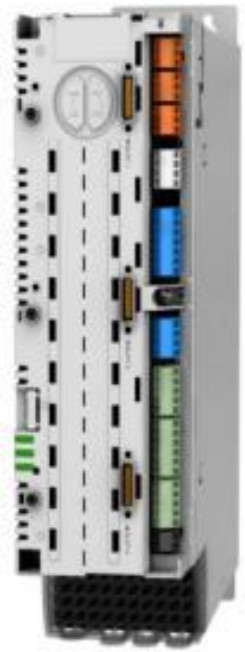


- Pluggable cards are optional,default 3 slots ,maximum extense to 7 external slots

2.2 Module Introduction

MD880 HCU- High Performance Controller

Cover and Keypad



HCU+inverter module

H1~H4

Power Rating Range

2.2 Module Introduction

FrameSize:H1 ~ H3

- Power Rating:
  H1: 3.7 ~ 11 kW;
  H2: 15 ~ 30 kW;
  H3: 37 ~ 45 kW
- Input Voltage：380 ~ 415 V
- DC/AC inverter
- Dimension(W x D x H)

  100mmX270mmX350mm (without front cover)

  100mmX446mmX414mm (with cover and connector)
- Weight： 9.5 kg

2.2 Module Introduction

FrameSize:H4

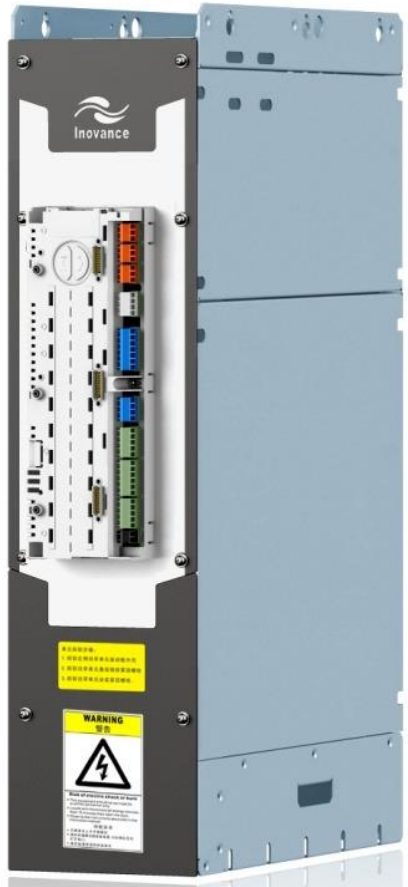
- Power Rating:
  H4: 55 ~ 90 kW;
- Input Voltage:380 ~ 415 V
- DC/AC inverter
- Dimension(W x D x H)

  200mmX270mmX350mm (without front cover)

  200mmX446mmX414mm (with cover and connector)
- Weight： 24 kg

Power Rating Range

2.2 Module Introduction



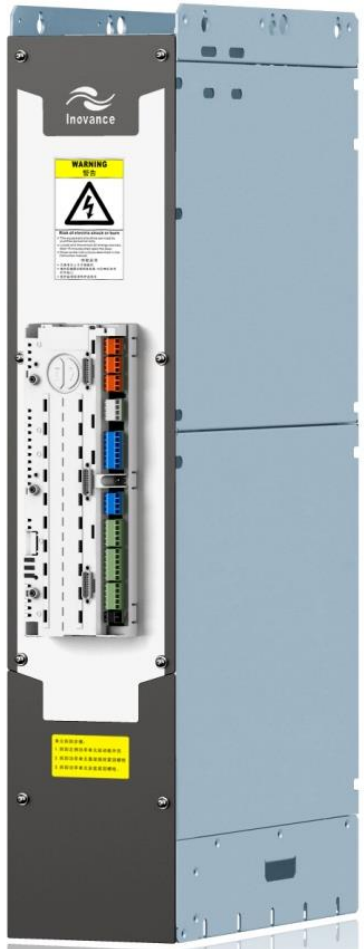
FrameSize:H6

- Power Rating:
  380~415V: 110~ 132 kW;
  525~690V: 55 ~ 160 kW;
- DC/AC inverter
- Dimension(W x D x H)

  180mmX440mmX770mm
- Weight:35kg

Power Rating Range

2.2 Module Introduction



FrameSize:H7

- Power Rating:
  380 ~ 415V: 160 ~ 200kW;
  525~690V : 200 ~ 250 kW;
- DC/AC inverter
- Dimension(W x D x H)

  180mmX465mmX920mm
- Weight:45kg

Power Rating Range

2.2 Module Introduction

FrameSize:H8

- Power Rating:
  380~415 V: 250 ~ 500 kW;
  525~690 V: 315 ~ 560 kW;
- DC/AC inverter
- Dimension(W x D x H)

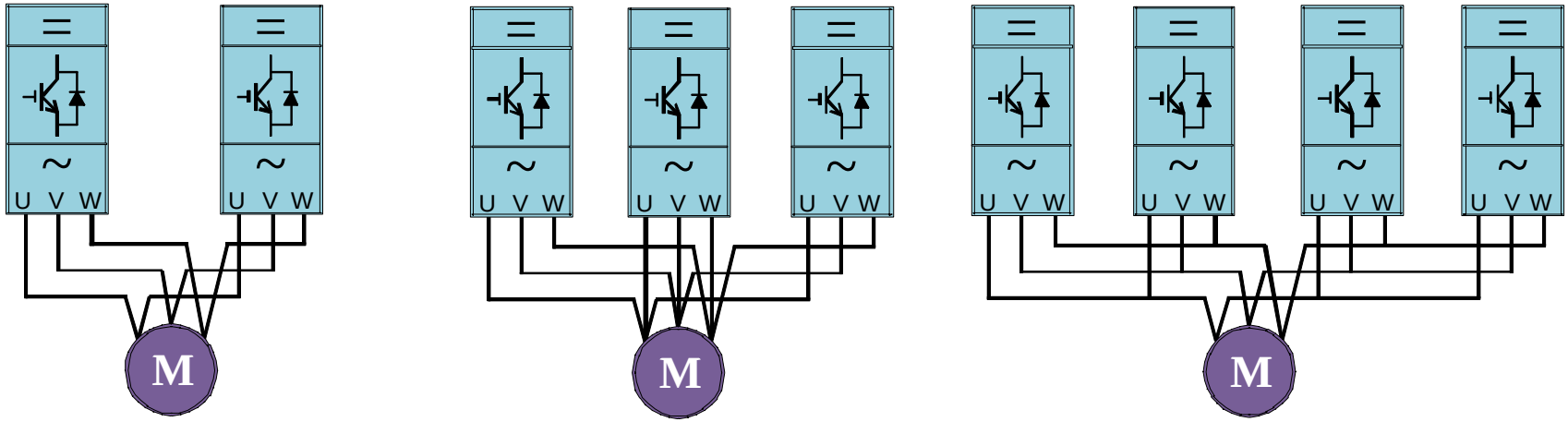
  230mmX582mmX1395mm
- Weigh

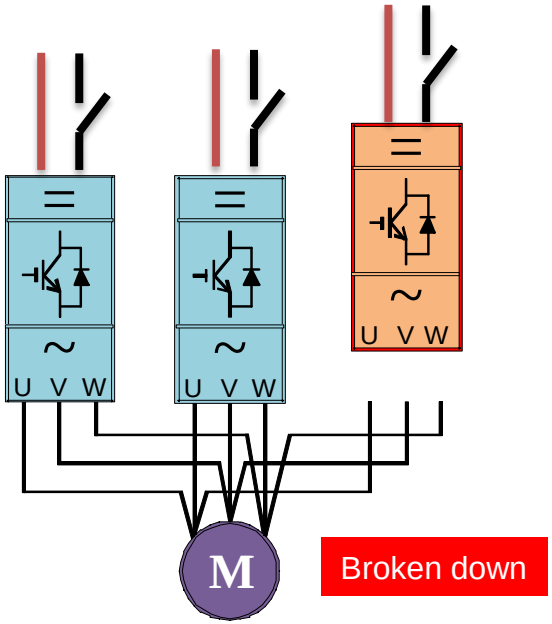
  108kg

  130kg including output reactor

Power Rating Range

2.2 Module Introduction





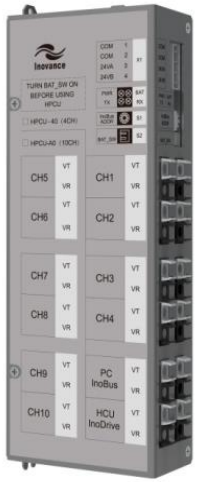
- H8 support maximum 10PCS parallel
- （2~6）xH8：380~415V：630~2800kW
- （2~10）xH8：525~690V：800~5600kW
- If one module is broken down，it can quickly be replaced or maintained without influencing other axis

Power Rating Range

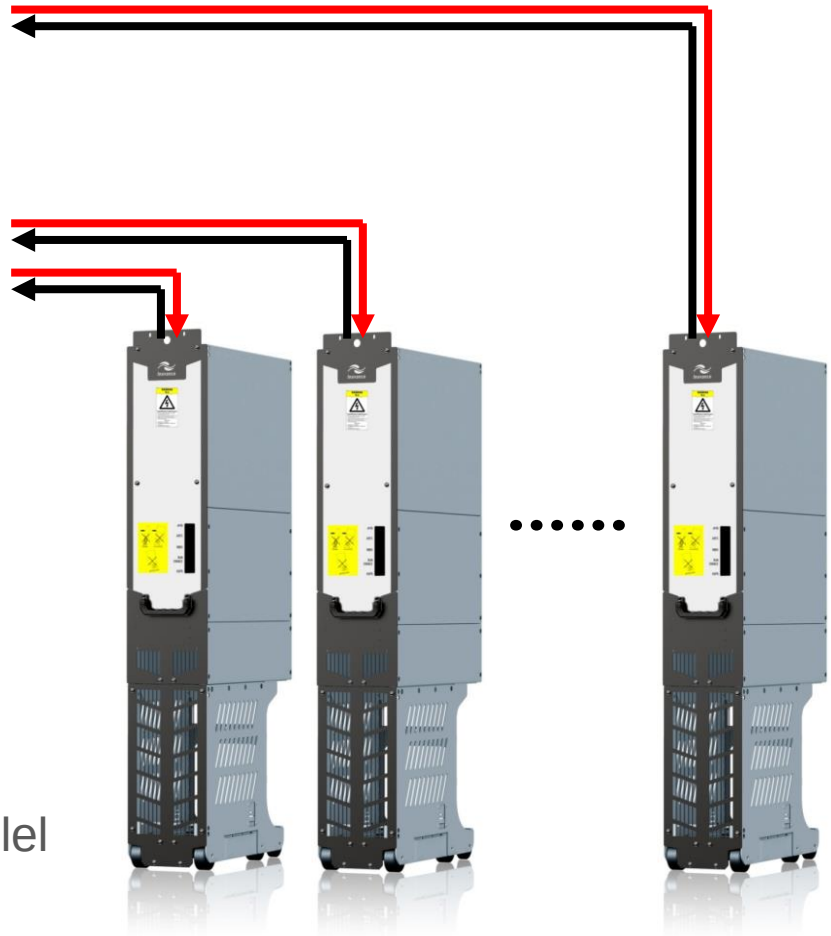
2.2 Module Introduction

HCU+HPCU
Physical photo

HCU



HPCU



- Maximum 10PCS parallel

Power Rating Range

2.2 Module Introduction

FrameSize:T2

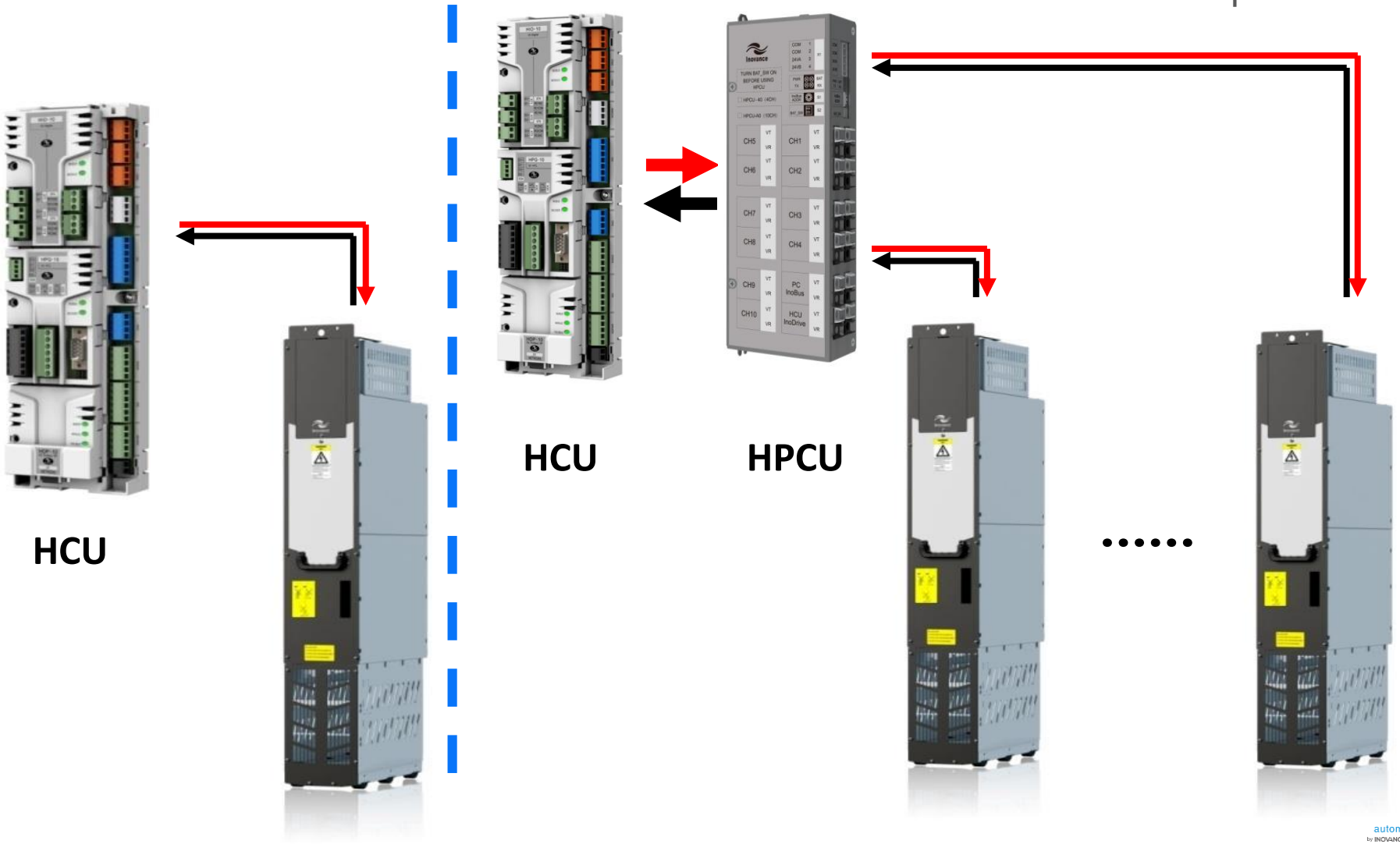
- Power Rating
  380 ~415 V: 473 ~ 647 kW;
  525~690V : 651 ~ 929 kW;
- AC/DC inverter
- Dimension(W x D x H)

  230mmX582mmX1395mm
- Weight： 188kg

Power Rating Range

2.2 Module Introduction

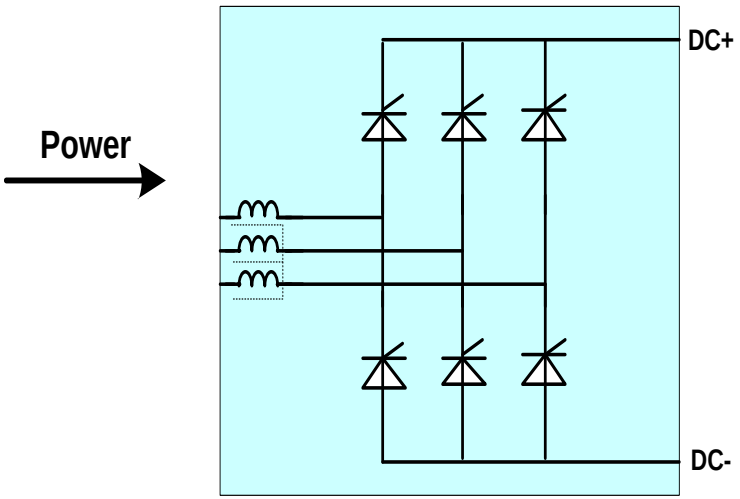
- Maximum 6PCS parallel



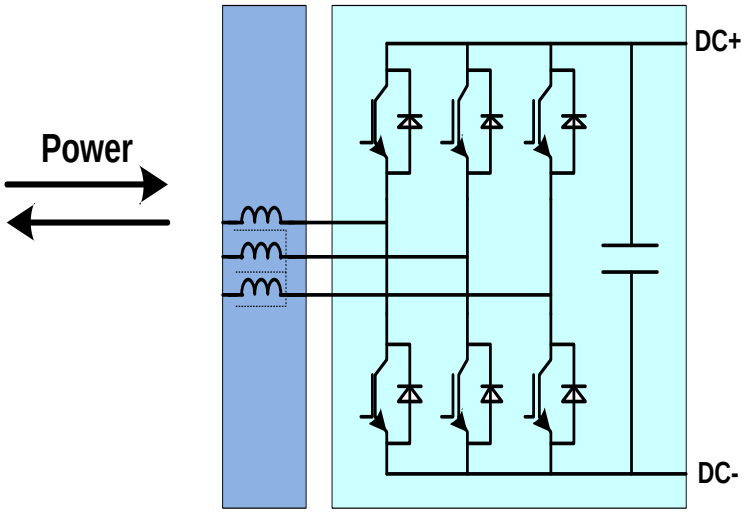
Power Rating Range

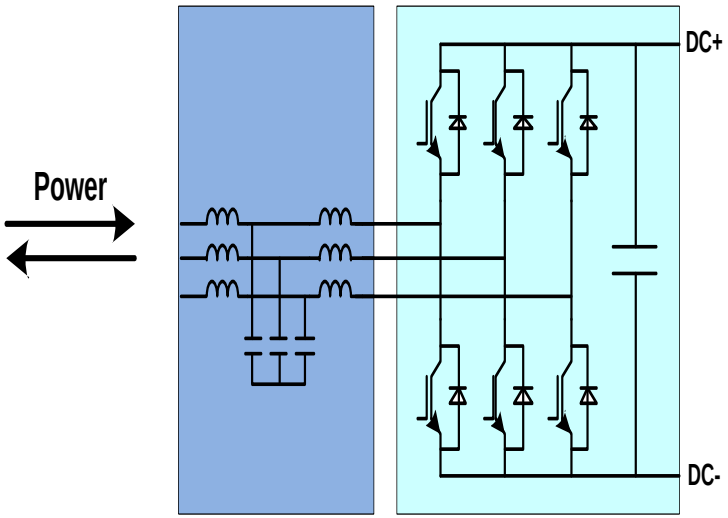
2.2 Module Introduction

Basic Rectifier



Feedback Rectifier





AFE

THD:

Basic Rectifier: 35%

Feedback Rectifier: 35%

AFE: 2~5%

PART 2

Power Rating Range

2.3 Specifications

Item	Basic Rectifier	Feedback Recitifier	AFE
Power component	Thyristor	IGBT	IGBT
Filter	L	L	LCL
Precharge Function	available	Not available	Not available
THD	30%~35%	30%~35%	< 5%
Power Factor	0.95	0.95	1
DC bus voltage adjust	Not available	Not available	available
Output Voltage	540~590VDC	540~590VDC	570~720VDC
	740~975VDC	740~975VDC	790~1035VDC
Power	**380~415V**： 55(493)~3759kVA **525~690V**： 483(678)~5402kVA	**380~415V**： 193~3319kVA **525~690V**： 155~6131kVA	**380~415V**： 193~3319kVA **525~690V**： 155~6131kVA
Application	Motor coast to stop,no need power Feedback, need to add brake unit if necessary	Hosting,support power feedback	Hoisting ,support power feedback,have an high level requirement in THD

Power Rating Range

Basic Rectifier: MD880-20M

Model	Normal Duty					Light Duty		Heavy Duty		Frame Size
	I_n	I_n	Imax	Sn	Pn	I	P	I	P	
	A (AC)	A (DC)	A (DC)	kVA	kW (DC)	A (DC)	kW (DC)	A (DC)	kW (DC)	
UN = 400V (380 ~ 415 V)，±10%（-15%，<1min）										
6 pulse										
MD880-20M-0718-4	718	879	1142	497	475	844	456	659	356	**T2**
MD880-20M-0982-4	982	1202	1562	680	649	1154	623	901	487	**T2**
MD880-20M-1336-4	1336	1635	2126	926	883	1570	848	1226	662	**2×T2**
MD880-20M-1826-4	1826	2235	2905	1265	1207	2146	1159	1676	905	**2×T2**
MD880-20M-2739-4	2739	3352	4358	1898	1810	3218	1738	2514	1358	**3×T2**
MD880-20M-3651-4	3651	4469	5809	2529	2413	4290	2317	3351	1810	**4×T2**
MD880-20M-4564-4	4564	5586	7262	3162	3016	5363	2896	4190	2262	**5×T2**
MD880-20M-5477-4	5477	6704	8715	3794	3620	6435	3475	5028	2715	**6×T2**
12 pulse										
MD880-20M-1336-4	1336	1635	2126	926	883	1570	848	1226	662	**2×T2**
MD880-20M-1826-4	1826	2235	2905	1265	1207	2146	1159	1676	905	**2×T2**
MD880-20M-2674-4	2674	3273	4255	1853	1767	3142	1697	2455	1325	**4×T2**
MD880-20M-3651-4	3651	4469	5809	2529	2413	4290	2317	3351	1810	**4×T2**
MD880-20M-4008-4	4008	4906	6377	2777	2649	4709	2543	3679	1987	**6×T2**
MD880-20M-5477-4	5477	6704	8715	3794	3620	6435	3475	5028	2715	**6×T2**
UN = 690V (525~690V)，±10%（-15%，<1min）										
6 pulse										
MD880-20M-0570-7	570	698	907	681	650	670	624	523	487	**T2**
MD880-20M-0815-7	815	998	1297	974	929	958	892	748	697	**T2**
MD880-20M-1061-7	1061	1299	1688	1268	1210	1247	1161	974	907	**2×T2**
MD880-20M-1515-7	1515	1854	2411	1811	1727	1780	1658	1391	1295	**2×T2**
MD880-20M-2273-7	2273	2782	3617	2716	2591	2671	2488	2087	1944	**3×T2**
MD880-20M-3031-7	3031	3710	4823	3622	3456	3561	3317	2782	2592	**4×T2**
MD880-20M-3788-7	3788	4636	6027	4527	4319	4451	4146	3477	3239	**5×T2**
MD880-20M-4546-7	4546	5564	7233	5433	5183	5341	4976	4173	3887	**6×T2**
12 pulse										
MD880-20M-1061-7	1061	1299	1688	1268	1210	1247	1161	974	907	**2×T2**
MD880-20M-1515-7	1515	1854	2411	1811	1727	1780	1658	1391	1295	**2×T2**
MD880-20M-2122-7	2122	2597	3376	2536	2419	2493	2323	1948	1814	**4×T2**
MD880-20M-3031-7	3031	3710	4823	3622	3456	3561	3317	2782	2592	**4×T2**
MD880-20M-4546-7	4546	5564	7233	5433	5183	5341	4976	4173	3887	**6×T2**

Power Rating Range

Feedback Rectifier:MD880-30M

Model	Normal Duty					Light Duty		Heavy Duty		Frame Size
	I_n	I_n	Imax	Sn	Pn	I	P	I	P	
	A (AC)	A (DC)	A (DC)	kVA	kW (DC)	A (DC)	kW (DC)	A (DC)	kW (DC)	
UN = 400V (380 ~ 415 V)，±10%（-15%，<1min）										
MD880-30M-0640-4	640	783	1018	443	423	752	406	587	317	L+H8
MD880-30M-0900-4	900	1102	1432	624	595	1057	571	826	446	L+H8
MD880-30M-1190-4	1190	1457	1894	825	787	1399	755	1093	590	L+2×H8
MD880-30M-1674-4	1674	2049	2664	1160	1106	1967	1062	1537	830	L+2×H8
MD880-30M-2380-4	2380	2913	3787	1649	1573	2796	1510	2185	1180	2×(L+2×H8)
MD880-30M-3348-4	3348	4098	5327	2319	2213	3934	2124	3073	1660	2×(L+2×H8)
MD880-30M-5022-4	5022	6147	7991	3479	3319	5901	3186	4610	2489	3×(L+2×H8)
UN = 690V (525~690V) ，±10%（-15%，<1min）										
MD880-30M-0600-7	600	734	955	717	684	705	657	551	513	L+H8
MD880-30M-0900-7	900	1102	1432	1076	1026	1057	985	826	770	L+H8
MD880-30M-1116-7	1116	1366	1776	1334	1272	1311	1221	1024	954	L+2×H8
MD880-30M-1674-7	1674	2049	2664	2001	1909	1967	1832	1537	1431	L+2×H8
MD880-30M-2232-7	2232	2732	3551	2667	2545	2623	2443	2049	1909	2×(L+2×H8)
MD880-30M-3348-7	3348	4098	5327	4001	3817	3934	3664	3073	2863	2×(L+2×H8)
MD880-30M-5022-7	5022	6147	7991	6002	5726	5901	5497	4610	4294	3×(L+2×H8)

Power Rating Range

AFE:MD880-40M

Model	Normal Duty					Light Duty		Heavy Duty		Frame Size
	I_n	I_n	Imax	Sn	Pn	I	P	I	P	
	A (AC)	A (DC)	A (DC)	kVA	kW (DC)	A (DC)	kW (DC)	A (DC)	kW (DC)	
UN = 400V (380 ~ 415 V)，±10%（-15%，<1min）										
MD880-40M-0575-4	575	657	854	398	394	631	379	493	296	BLCL+H8
MD880-40M-0810-4	810	926	1204	561	556	889	533	694	417	BLCL+H8
MD880-40M-1092-4	1092	1248	1623	757	749	1198	719	936	562	BLCL+2×H8
MD880-40M-1539-4	1539	1759	2287	1066	1056	1689	1013	1319	792	BLCL+2×H8
MD880-40M-2185-4	2185	2498	3247	1514	1499	2398	1439	1873	1124	2×(BLCL+2×H8)
MD880-40M-3078-4	3078	3519	4574	2132	2111	3378	2027	2639	1583	2×(BLCL+2×H8)
MD880-40M-4617-4	4617	5278	6861	3199	3167	5067	3040	3958	2357	3×(BLCL+2×H8)
UN = 690V (525~690V) ，±10% (-15% , <1min)										
MD880-40M-0369-7	369	422	548	441	437	405	419	316	327	BLCL+H8
MD880-40M-0540-7	540	617	802	645	639	593	613	463	479	BLCL+H8
MD880-40M-0701-7	701	801	1042	838	829	769	796	601	622	BLCL+2×H8
MD880-40M-1026-7	1026	1173	1525	1226	1214	1126	1165	880	910	BLCL+2×H8
MD880-40M-1402-7	1402	1603	2083	1676	1659	1539	1592	1202	1244	2×(BLCL+2×H8)
MD880-40M-2052-7	2052	2346	3049	2452	2428	2252	2331	1759	1821	2×(BLCL+2×H8)
MD880-40M-3078-7	3078	3519	4574	3678	3642	3378	3496	2639	2731	3×(BLCL+2×H8)
MD880-40M-4104-7	4104	4691	6099	4905	4856	4504	4661	3519	3642	4×(BLCL+2×H8)
MD880-40M-5130-7	5130	5864	7632	6131	6069	5630	5827	4398	4552	5×(BLCL+2×H8)

Power Rating Range

Inverter Module:MD880-50M 400V

Model	Normal Duty			Light Duty		Heavy Duty		Frame Size
	I_n	I_n	Imax	I	P	I	P	
	A (AC)	A (DC)	A (DC)	A (DC)	kW (DC)	A (DC)	kW (DC)	
UN = 400V (380 ~ 415 V)， ±10%（-15%，<1min）								
MD880-50M-0009-4	9	11	3.7	9	3.7	5.1	2.2	H1
MD880-50M-0013-4	13	15.6	5.5	13	5.5	9	3.7	H1
MD880-50M-0017-4	17	21	7.5	17	7.5	13	5.5	H1
MD880-50M-0023-4	23	27	11	22	11	17	7.5	H1
MD880-50M-0033-4	33	40	15	32	15	25	11	H2
MD880-50M-0038-4	38	51	18.5	37	18.5	32	15	H2
MD880-50M-0048-4	48	59	22	45	22	37	18.5	H2
MD880-50M-0060-4	60	72	30	58	30	45	22	H2
MD880-50M-0078-4	78	96	37	75	37	60	30	H3
MD880-50M-0094-4	94	120	45	91	45	75	37	H3
MD880-50M-0116-4	116	146	55	112	55	91	45	H4
MD880-50M-0149-4	149	179	75	143	75	112	55	H4
MD880-50M-0183-4	183	240	90	176	90	150	75	H4
MD880-50M-0245-4	245	294	110	236	110	184	90	H6
MD880-50M-0299-4	299	358	132	287	132	224	110	H6
MD880-50M-0349-4	349	419	160	335	160	262	132	H7
MD880-50M-0395-4	395	486	200	380	200	296	160	H7
MD880-50M-0516-4	516	619	250	495	250	387	200	H8
MD880-50M-0639-4	639	766	355	613	315	479	250	H8
MD880-50M-0757-4	757	909	400	727	400	568	315	H8
MD880-50M-0900-4	900	1080	500	864	450	675	355	H8

Power Rating Range

Inverter Module:MD880-50M 400V

Model	Normal Duty			Light Duty		Heavy Duty		Frame Size
	I_n	I_n	Imax	I	P	I	P	
	A (AC)	A (DC)	A (DC)	A (DC)	kW (DC)	A (DC)	kW (DC)	
UN = 400V (380 ~ 415 V)， ±10%（-15%，<1min）								
MD880-50M-1213-4	1213	1456	630	1165	630	910	500	2×H8
MD880-50M-1439-4	1439	1727	800	1381	800	1079	630	2×H8
MD880-50M-1710-4	1710	2052	1000	1642	900	1283	710	2×H8
MD880-50M-2158-4	2158	2590	1200	2072	1200	1619	900	3×H8
MD880-50M-2565-4	2565	3078	1400	2072	1400	1924	1000	3×H8
MD880-50M-3420-4	3420	4104	1800	3283	1800	2565	1400	4×H8
MD880-50M-4275-4	4275	5130	2400	4104	2000	3206	1800	5×H8
MD880-50M-5130-4	5130	6156	2800	4925	2400	3848	2000	5×H8

Power Rating Range

Inverter Module:MD880-50M 690V

Model	Normal Duty			Light Duty		Heavy Duty		Frame Size
	I_n	I_n	Imax	I	P	I	P	
	A (AC)	A (DC)	A (DC)	A (DC)	kW (DC)	A (DC)	kW (DC)	
UN = 690 V (525 ~ 690 V)， ±10%（-15%，<1min）								
MD880-50M-0062-7	62	74	55	60	55	46	45	H6
MD880-50M-0082-7	82	98	75	79	75	61	55	H6
MD880-50M-0099-7	99	118	90	95	90	74	75	H6
MD880-50M-0125-7	125	150	110	120	110	94	90	H6
MD880-50M-0144-7	144	173	132	138	132	108	110	H6
MD880-50M-0192-7	192	230	160	184	160	144	132	H6
MD880-50M-0217-7	217	259	200	215	200	162	160	H7
MD880-50M-0270-7	270	323	250	260	250	202	200	H7
MD880-50M-0340-7	340	408	315	326	315	255	250	H8
MD880-50M-0410-7	410	492	400	394	355	308	315	H8
MD880-50M-0530-7	530	636	500	509	450	398	355	H8
MD880-50M-0600-7	600	720	560	576	560	450	400	H8
MD880-50M-0779-7	779	935	800	748	710	584	560	2×H8
MD880-50M-1007-7	1007	1208	1000	967	900	755	710	2×H8
MD880-50M-1140-7	1140	1368	1100	1094	1000	855	800	2×H8
MD880-50M-1510-7	1510	1813	1400	1450	1400	1133	1100	3×H8
MD880-50M-1710-7	1710	2052	1600	1642	1600	1283	1200	3×H8
MD880-50M-2280-7	2280	2736	2000	2189	2000	1710	1600	4×H8
MD880-50M-2850-7	2850	3420	2800	2736	2400	2138	2000	5×H8
MD880-50M-3420-7	3420	4104	3200	3283	3200	2565	2400	6×H8
MD880-50M-3990-7	3990	4788	3600	3830	3600	2993	2800	7×H8
MD880-50M-4560-7	4560	5472	4400	4378	4000	3420	3200	8×H8
MD880-50M-5130-7	5130	6156	4800	4925	4800	3848	3600	9×H8
MD880-50M-5700-7	5700	6840	5600	5472	5200	4275	4000	10×H8

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3. Functions & Features

3.1 Excellent Performance

3.2 Free to Programme

3.3 Higher Reliability

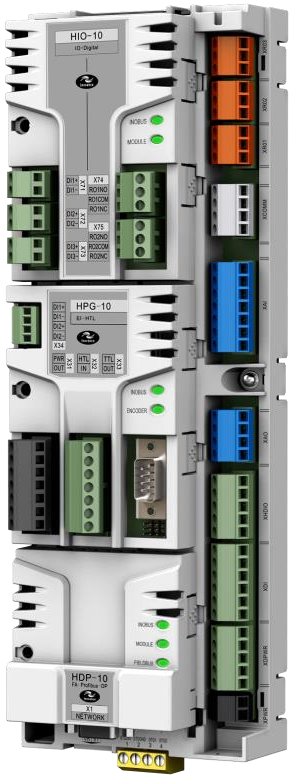
3.4 Remote Service and Diagnose

3.5 Extensive Communication Bus Protocols

3.6 Compact and Smart Mechanical Design

Functions & Features

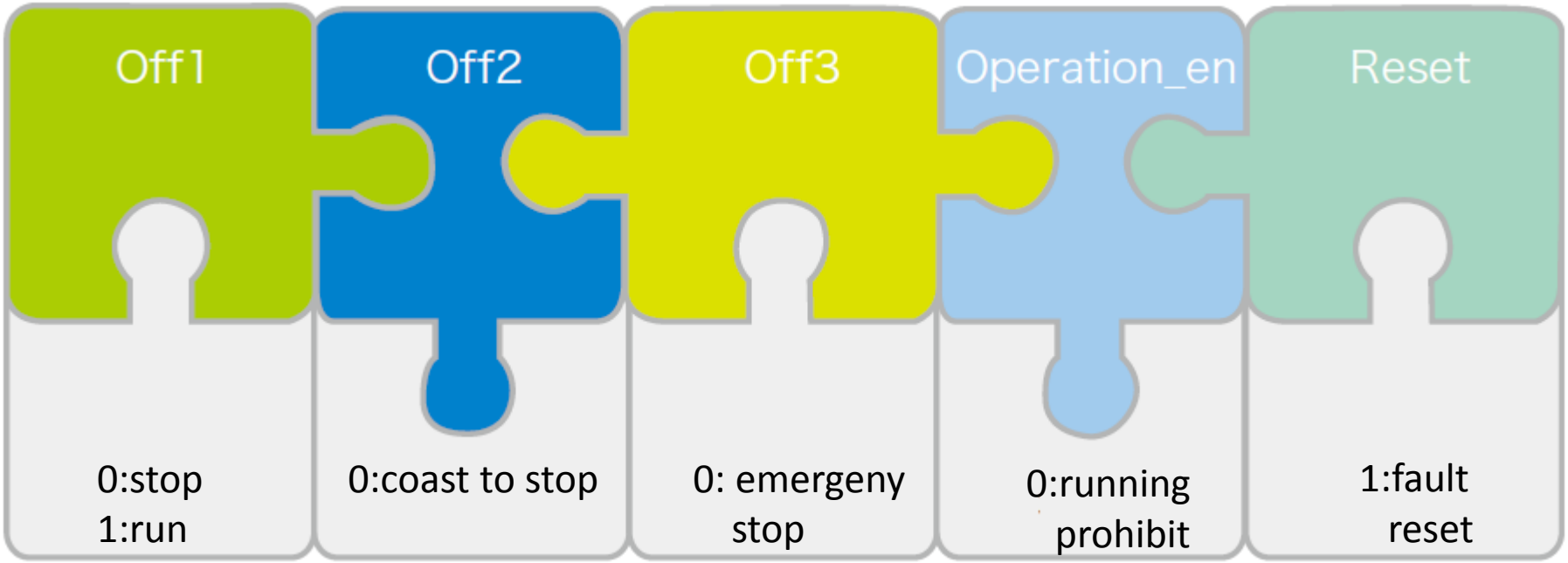
3.1 Excellent Performance



1	Torque response time	<5mS，open loop，rated torque <5mS，closed loop，rated torque
2	Torque nonlinearity	±4%，open loop，rated torque； ±3%，closed loop，rated torque
3	Static speed accuracy	Motor slip*10%，open loop 0.01%，closed loop
4	Dynamic seed accuracy	0.3%*S~0.4%*S,100% torque step response,open loop 0.1%*S~0.2%*S，100% torque step response,closed loop
5	Overload Ability	Light duty：110% 1min/5mins Heavy duty：150% 1min/5mins
6	Output frequency	SVC： 0~300Hz; FVC: 0~300Hz
7	Power factor	AFE：=1；
8	Harmonics	AFE： THDI<5%

3.2 Free to Programme

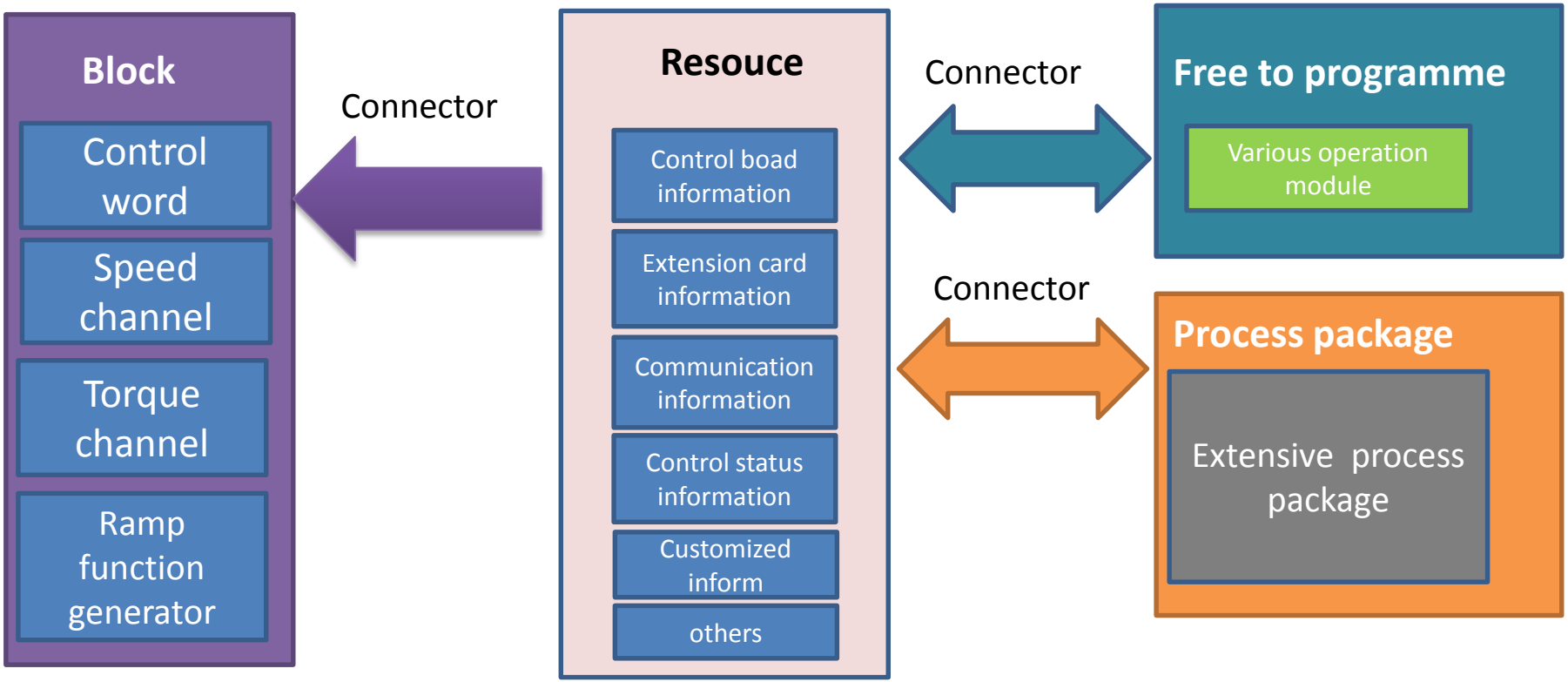
- Input port status, dirve status word,dirve running status word can be configurated flexibly



Common control word

3.2 Free to Programme

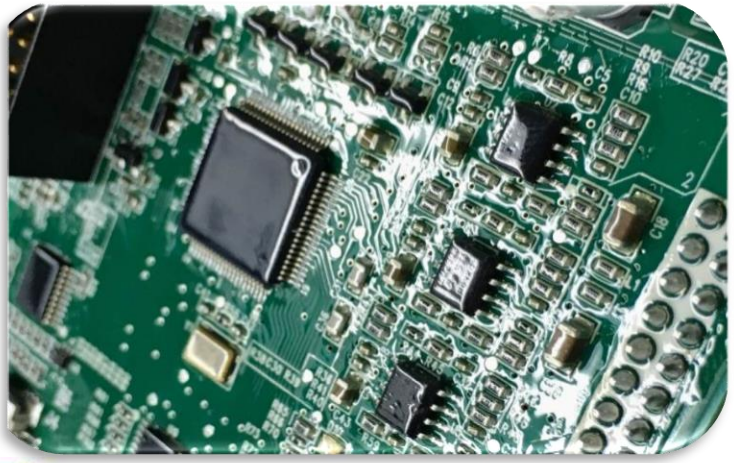
- Free to programme,easy for client to customize function for their special requirment



3.3 Higher Reliability

- Vehicle-Class compononts,life time is more than 10 years

3.3 Higher Reliability

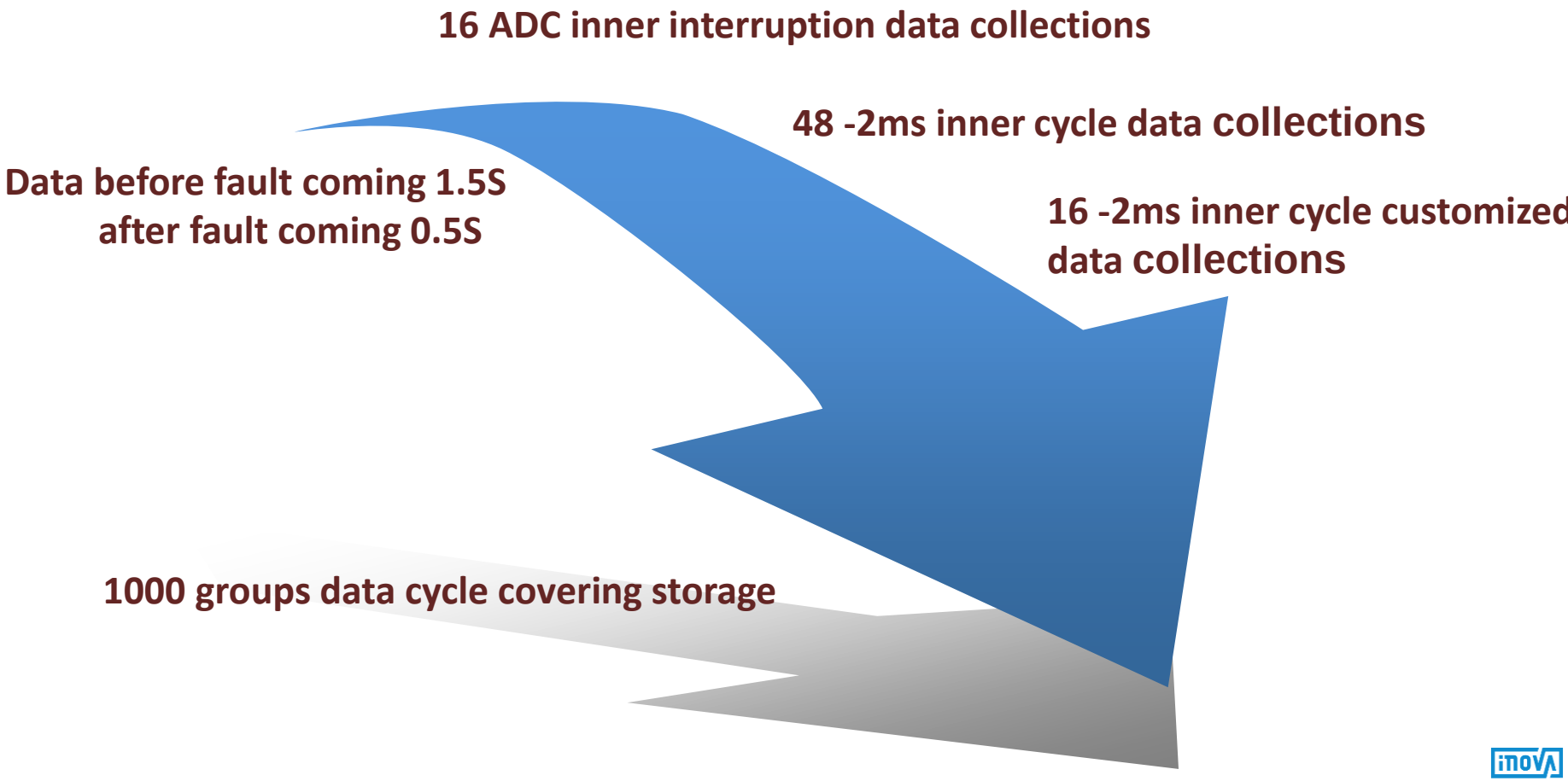


- Enhanced reliability with PCB conformal coating, protection against humidity and dust
- Coating comply with IEC607213-3

Auto Conformal Coating Line

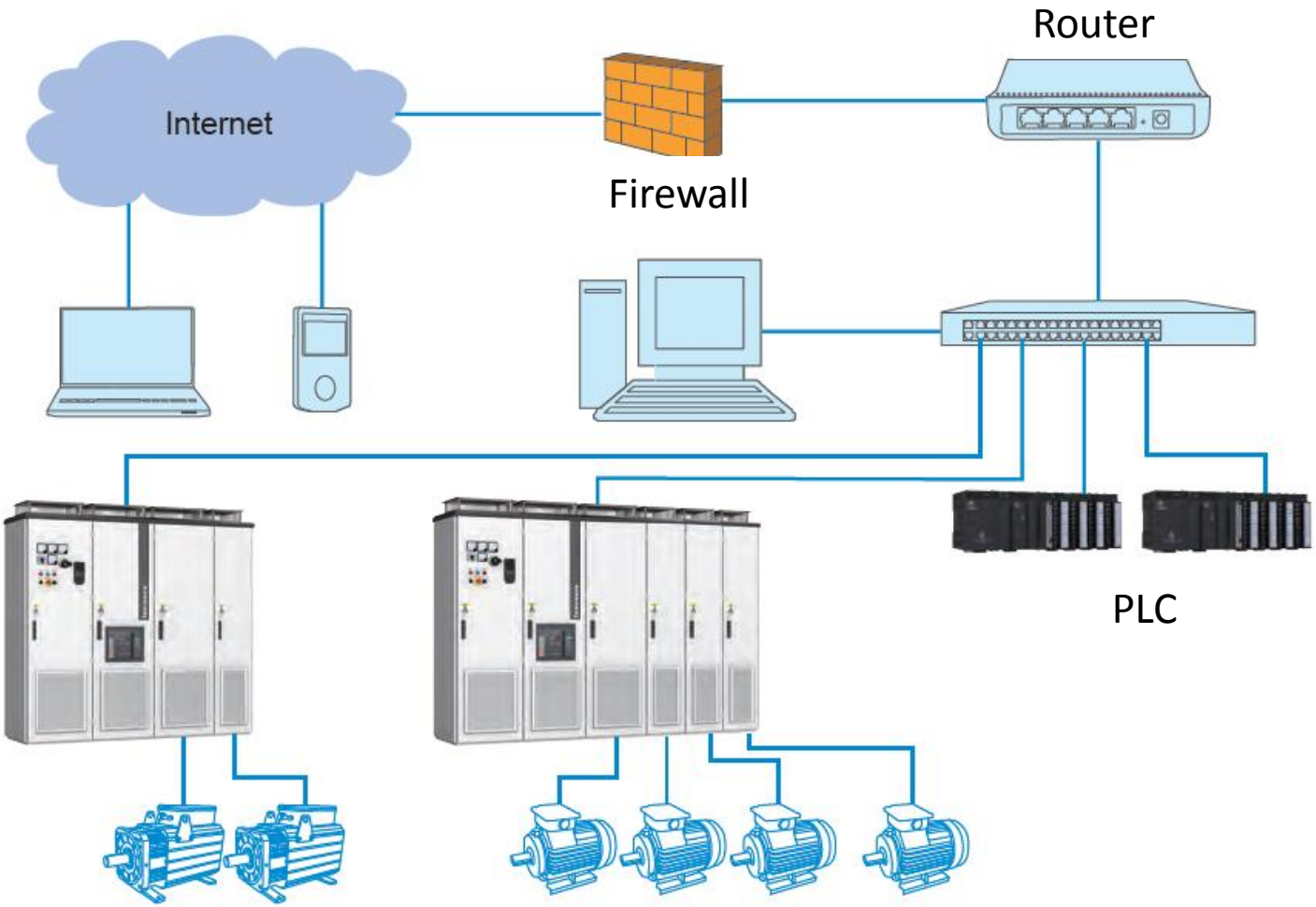
3.3 Higher Reliability

- Black box inside,convenient to analyse data,find out what cause fault quickly



3.4 Remote Service and Diagnose

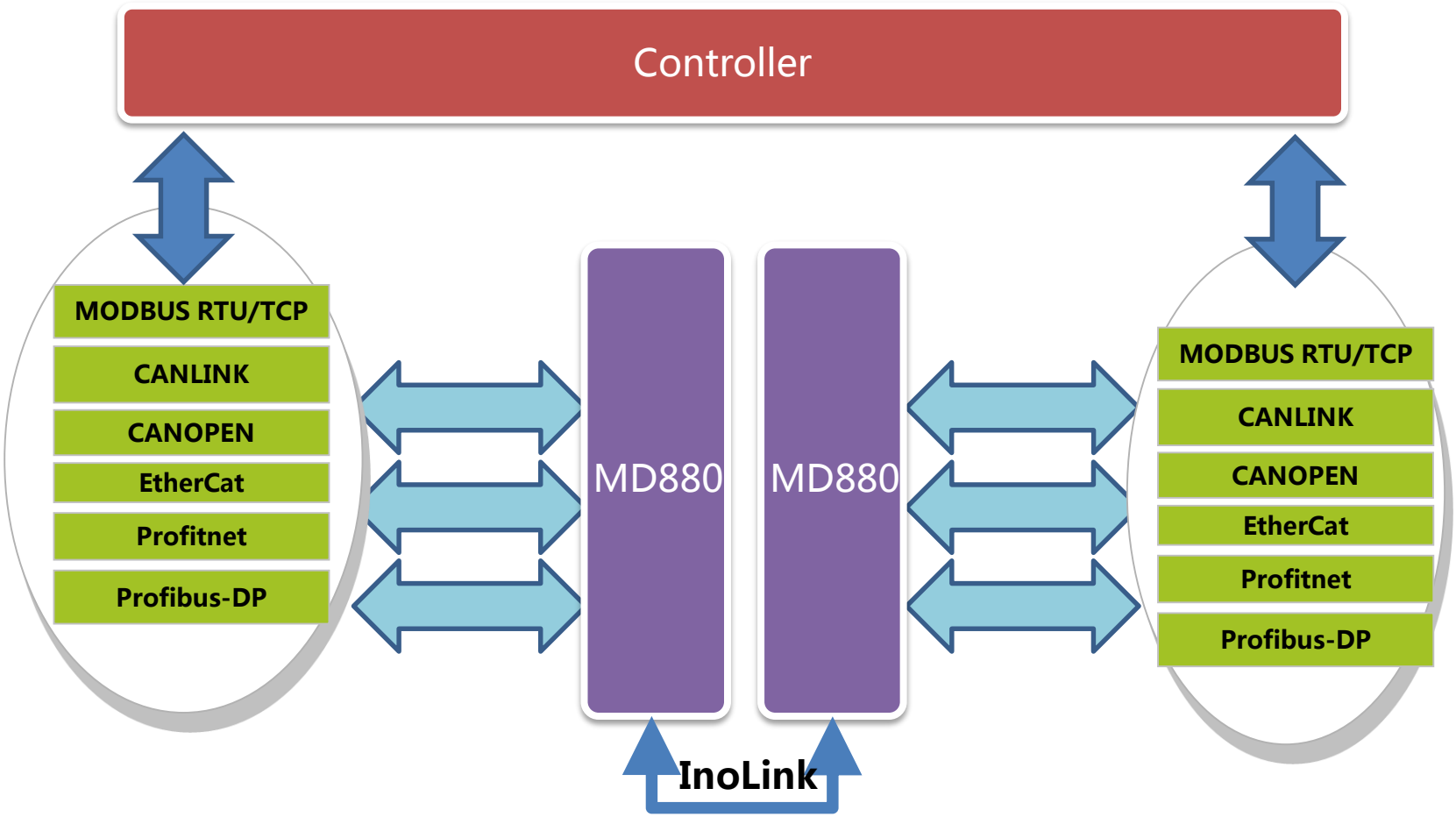
- Remote service is optional. Under the authority of client,our engineer can check and improve parameters in customer side through internet



Functions & Features

3.5 Extensive Communication Bus Protocols

- Support extensive communication bus protocols,can work with different brand of controllers, can replace old drive easily ,no need to amend programme

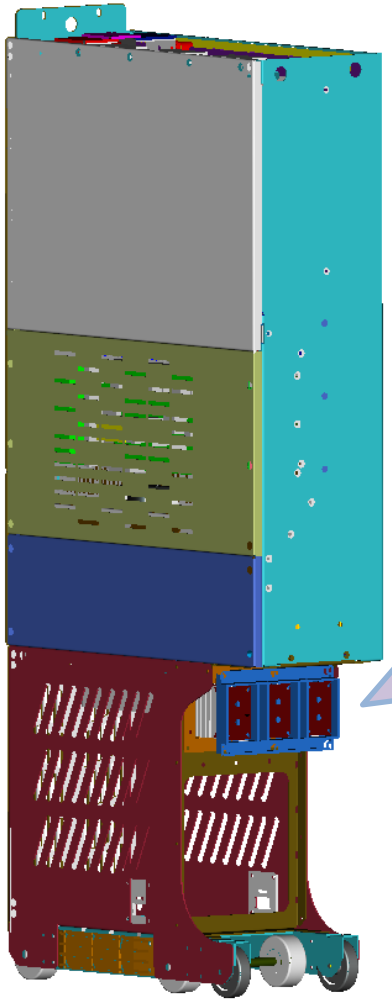


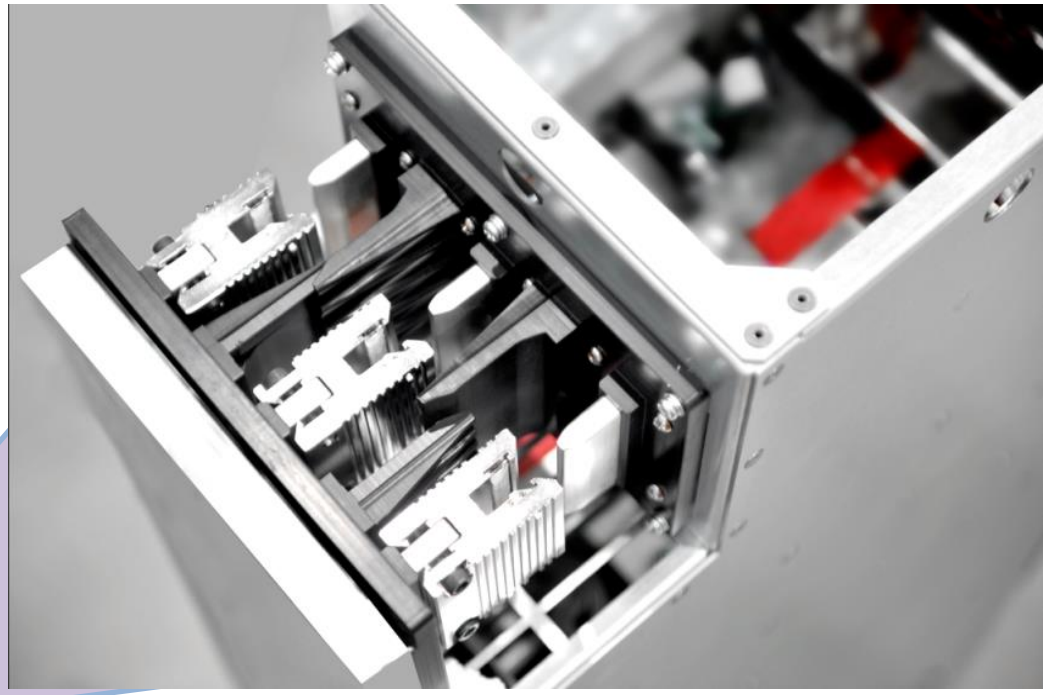
Functions & Features

3.6 Compact and Smart Mechanical Design

- Won world wide famous IF design award 2017

3.6 Compact and Smart Mechanical Design





Quick-C quick power connector

- Install modules without any cables
- Wheels in bottom,make it easy to pull and push modules

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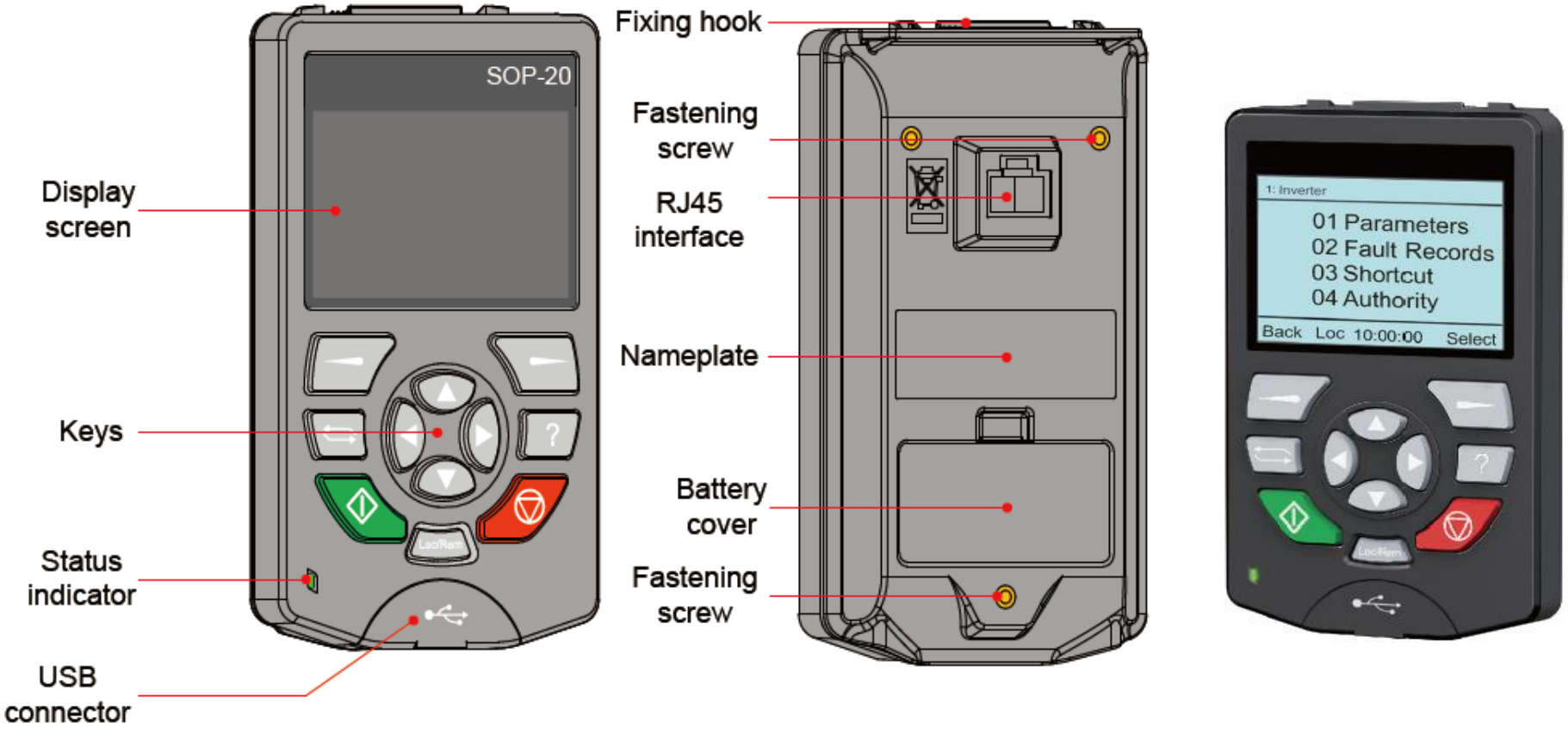
Accessories List

4.1 Remote Keypad

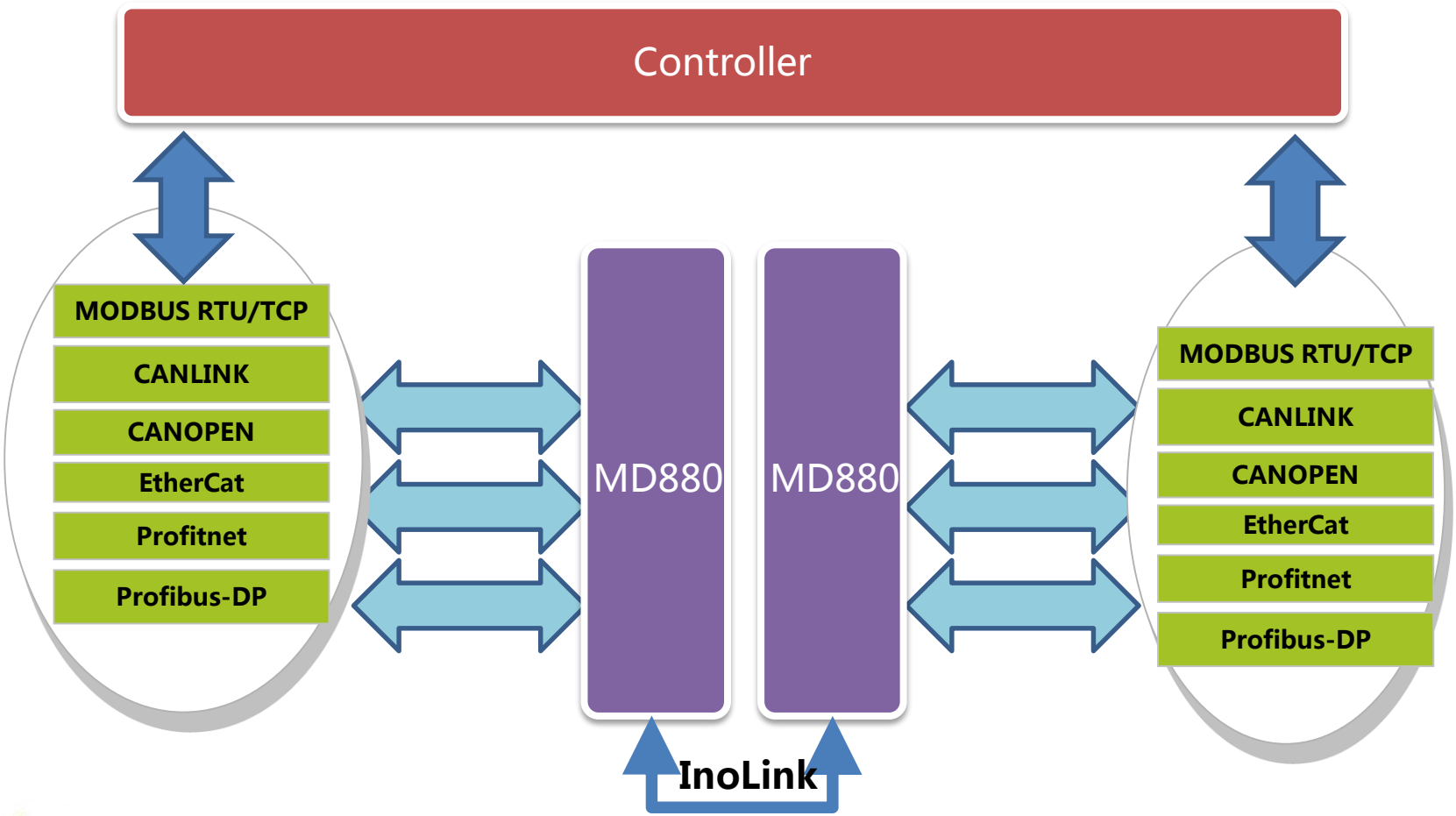
- Model:SOP-20-880
- 8G SD card inside



Accessories List

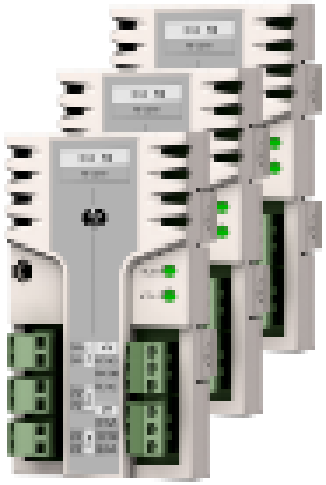
4.2 Communications

- Support extensive communication protocols

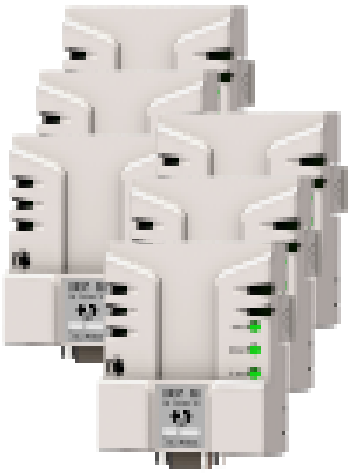


4.3 Expansion Card

HIO-xx
IO Extension Card



HPG-xx
Encoder Card



Hxx
Communication bus card

■ Encoder Card Type:

TTL、HTL、UVW、Sin/Cos、Resolver

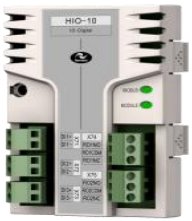
■ Communication Bus Card:

PROFIBUS DP、CANopen、Modbus-RTU

PROFINET IO、Modbus-TCP、EtherCat

Accessories List

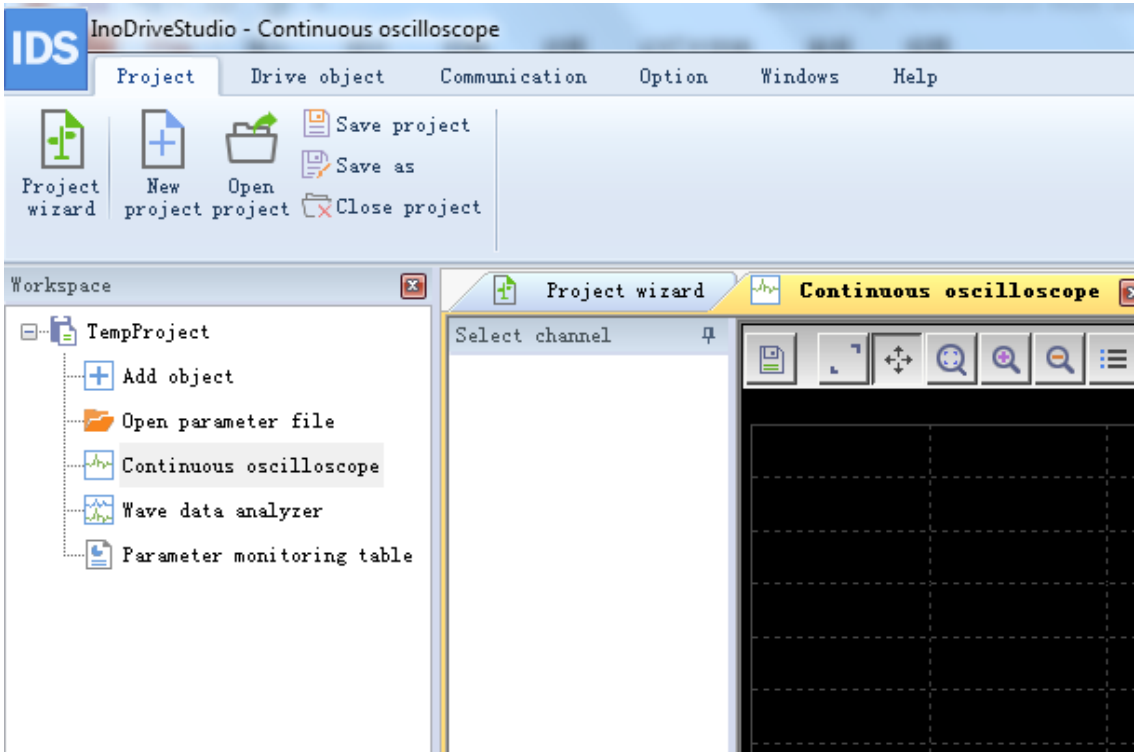
4.3 Expansion Card

S/N	I/O Extension Card	Encoder Card	Communication bus card	Optical fiber extension card
Picture				
Card Type	1. HIO-10: 3xDI+2xRO 2. HIO-20: 3xAI+2xAO+2xDI 3. HIO-30: 2xAI+2xAO+1xRO	1. HPG-10: HTL incremental encoder 2. HPG-20: UVW encoder 3. HPG-30: Sin/Cos encoder 4. HPG-40: Resolver 5. HPG-50: TTL incremental encoder	1. HDP-10：PROFIBUS DP 2. HCAN-10：CANopen 3. HCAN-20：CANlink 4. HMBA-10：Modbus RTU 5.HETC-10：EtherCAT(RJ45) 6.HETC-20：EtherCAT(optical) 7.HPFN-10：PROFINET IO 8.HMBT-10：Modbus TCP 9. HETN-10：EtherNet commissioning card	1.HOFM-10 extend 1 optical channel 2. HOFM-30 extend 3 optical channels

Accessories List

4.4 PC-Based Monitoring Software

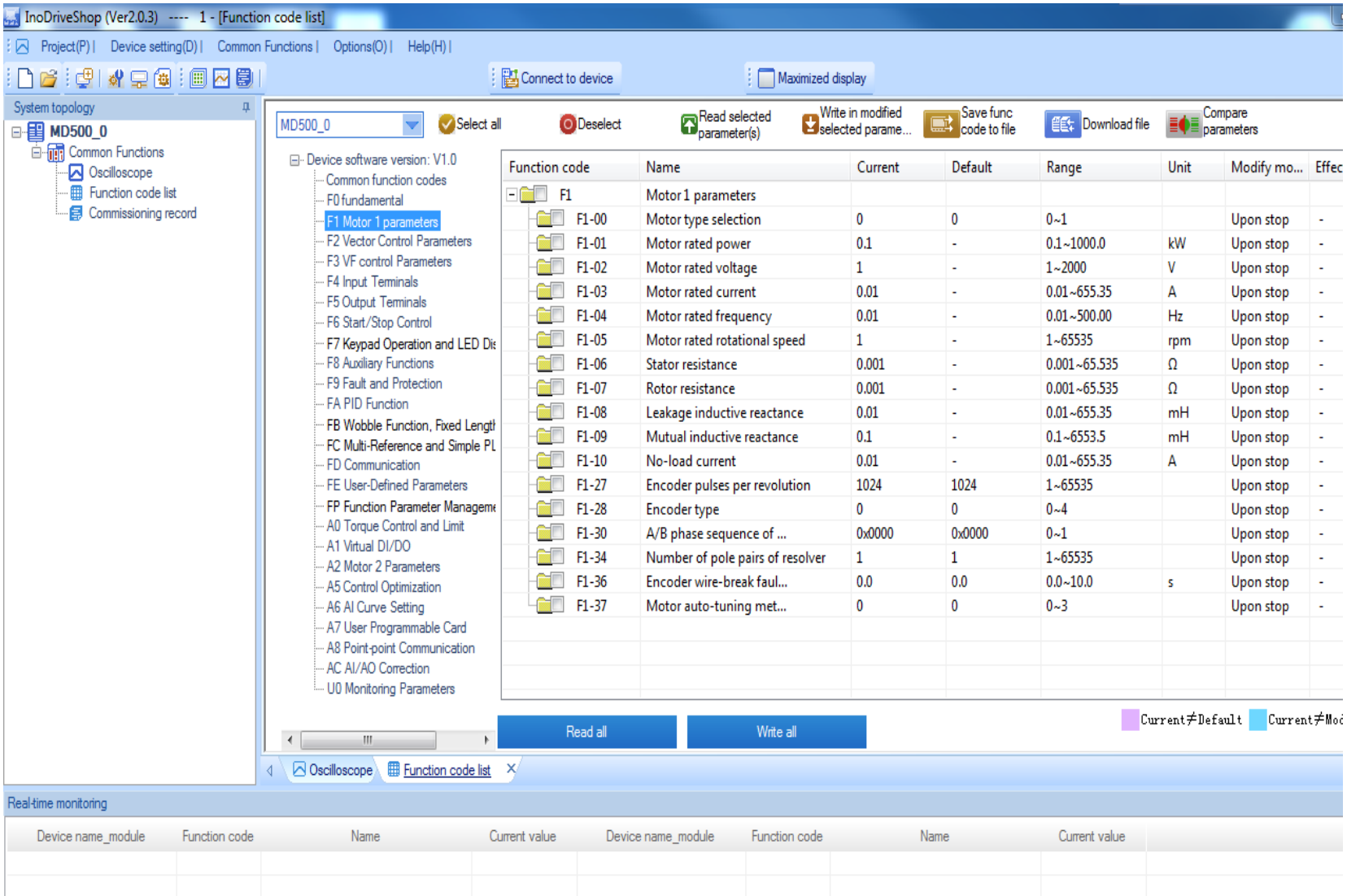
- PC-based monitor software-**InoDriveStudio** can support the drive parameters upload, download, real-time oscilloscope and other functions.
- Operating in Win7\WinXP\WIN10



- Real-time oscilloscope

4.4 PC-Based Monitoring Software

- Parameters adjust,upload,download



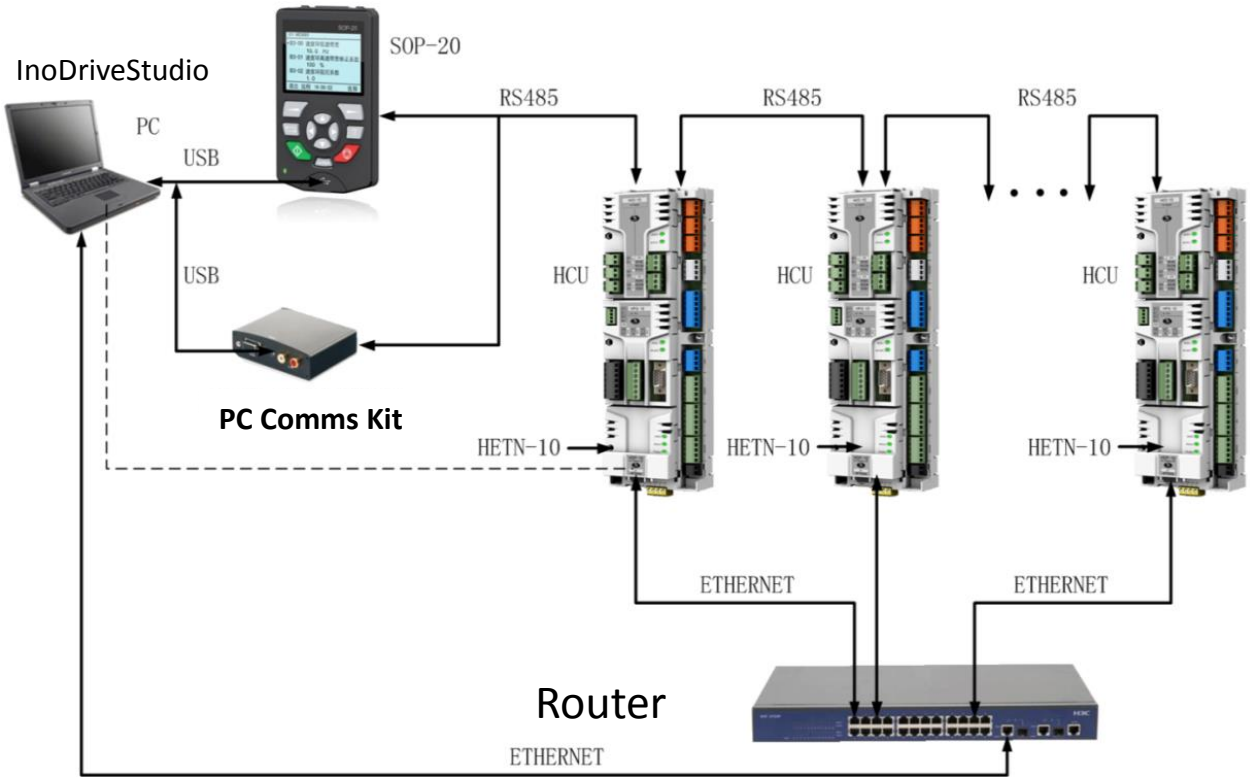
Accessories List

4.4 PC-Based Monitoring Software

PC

RS 485

Ehter net



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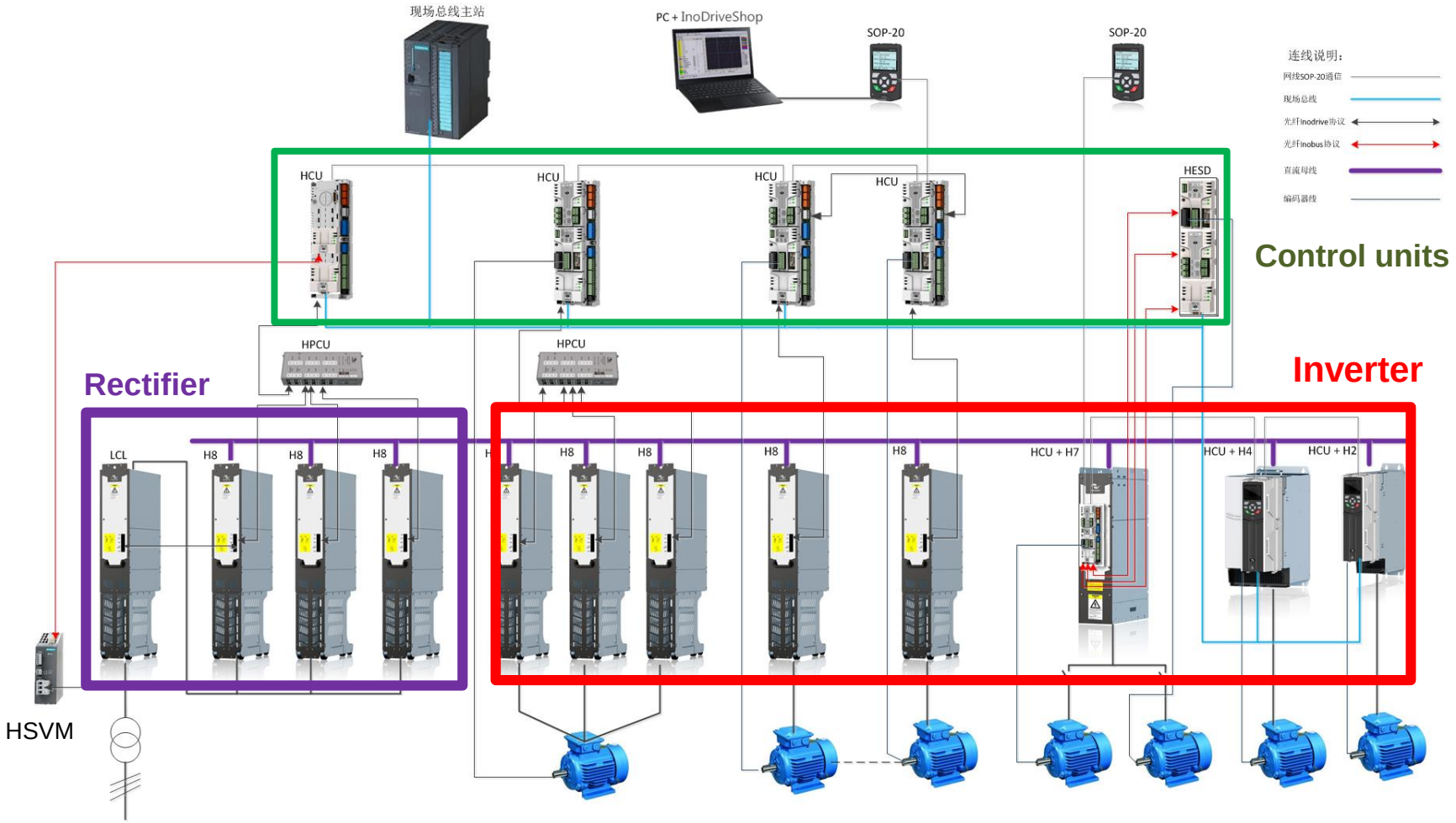
5. System Application

System Application

5.1 Typical System Connection



5.2 MD880 Served Industries

Metal process

Papermaking

Hoisting

Oil drilling

Metallurgy

Ship propulsion system

Coal mine

Shore power

5.3 Application In Metal Industry

- **Client**: Bao Gang ShangHai-
- **Project**: Replace Siemens 6SE70 --4.3m metal sheet product line

6SE70

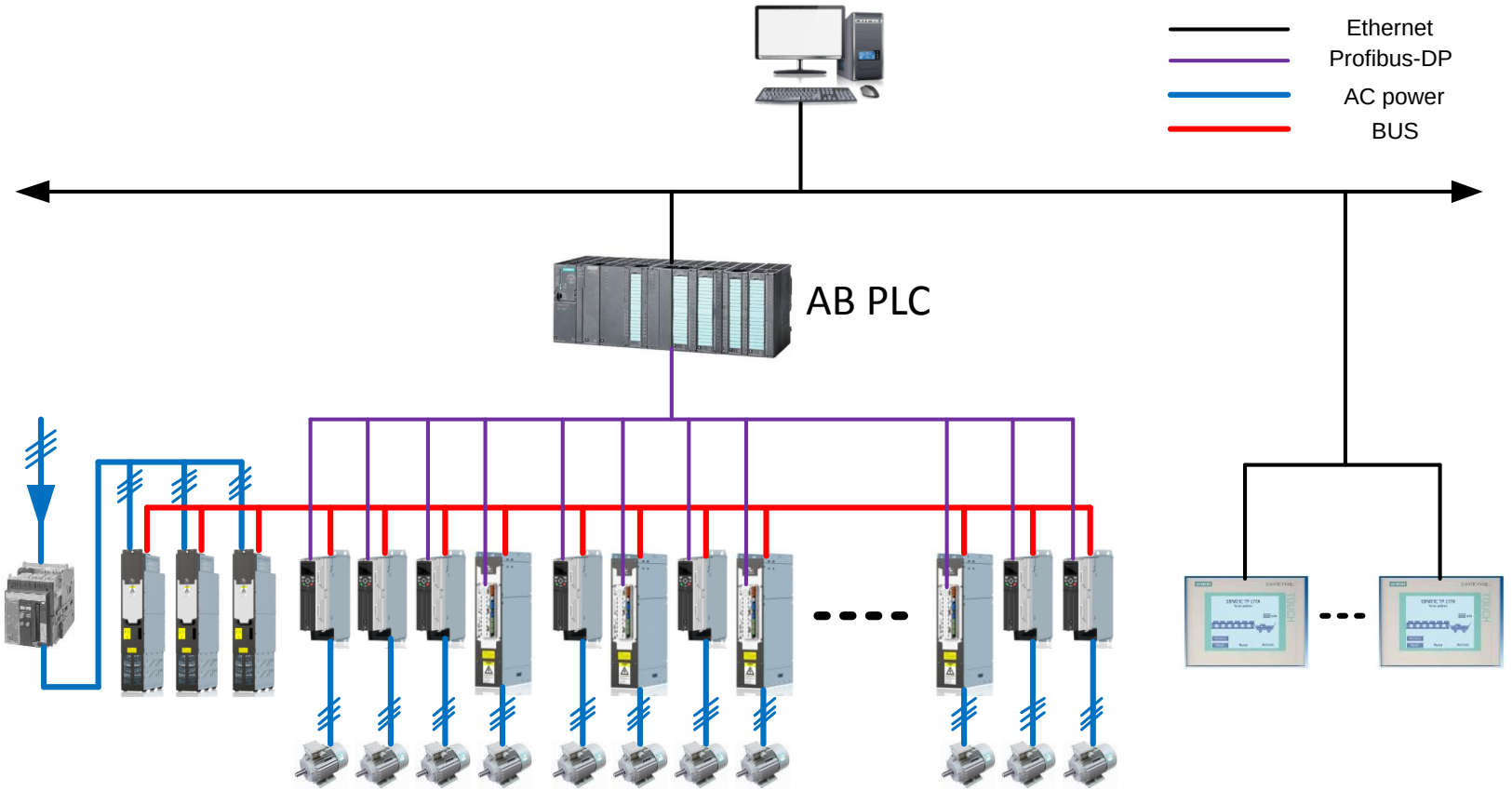
MD880

- 380V/2x355kW

  380V/2x500kW/2 Sets

5.4 Application In Papermaking

- **Client**: HuaTai ShanDong
- **Project**:main power transmission 28 axes



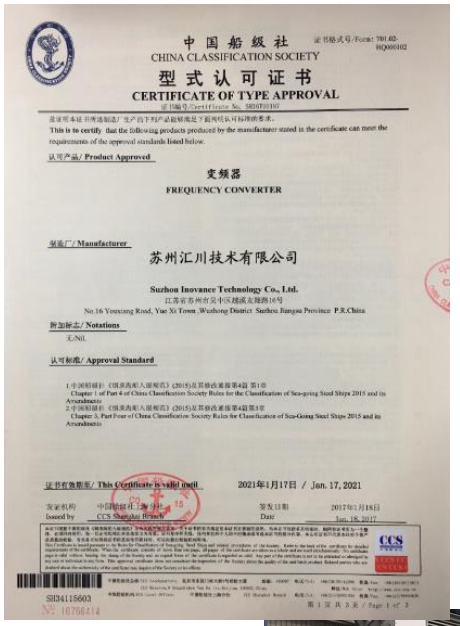
5.5 Application In Ship Propulsion System and Hoisting

- **Client**: ZPMC (Zhenhua engineering industry ShangHai)
- **Project**:Win power installation ship propulsion and hoisting system
- **Propulsion system**： 4*50kW/660V*16PCS 4*1500kW/690V motors
  24 pulse rectifier IP23
- **Hoisting system**： **2000** ton weight 800kVA

System Application

5.5 Application In Ship Propulsion System and Hoisting

Hoisting system



中国船级社
CHINA CLASSIFICATION SOCIETY
型式认可证书
CERTIFICATE OF TYPE APPROVAL

This is to certify that the following products produced by the manufacturer stated in the certificate can meet the requirements of the approval standards listed below.

认可产品/ Product Approved

变频器
FREQUENCY CONVERTER

制造厂/ Manufacturer

苏州汇川技术有限公司

Suzhou Inovance Technology Co., Ltd.
江苏省苏州市吴中区越溪友翔路16号
No.16 Youxiang Road, Yue Xi Town, Wuzhong District Suzhou Jiangsu Province P.R.China

附加标志/ Notations
-/-Nil.

认可标准/ Approval Standard

证书有效期至/ This Certificate is valid until 2021年1月17日 / Jan. 17, 2021

发证机构 Issued by CCS Shanghai Branch

签发日期 Date 2017年1月18日 Jan. 18, 2017

SH3411560 3

Authorized by
Ship association

Propulsion system

automation

by INOVANCE technology

Forward, Always Progressing !