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**A PIONEERING TECHNOLOGY
LEADER IN INDUSTRIAL AUTOMATION AND
ELECTRIFICATION PRODUCTS.**

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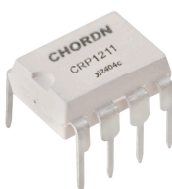
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Industrial
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electrification

Solid State
Relays

01



Single Phase

	CR1T/CR1S	CR1V	CR1U
Switching voltage	48-280V/440V/530V/660Vac	48-280V/530V/660Vac	48-280V/440V/530V/660Vac
Switching current	25A-40A-50A-75A-100A-125A	25A-40A-50A-75A-100A	10A-20A-25A-40A-50A-75A
Control voltage	4-32Vdc/90-280Vac	4-32Vdc/90-280Vac	4-32Vdc/90-280Vac
Peak voltage	600V-800V-1200V-1600V	600V-1200V-1600V	600V-800V-1200V-1600V
Mounting method	Panel	Panel	Panel/DIN
Built-in protection	RC/VDR	RC/VDR	RC
Protection level	IP00	IP20	IP20
Input indication	LED indication	LED indication	LED indication

	CR1Txx/CR1Uxx	CRD1T	CR1M/CR1MT/CR1MS	CRD1M
Switching voltage	200-530Vac	0-30V/50V/100V/200V/500Vdc	12-280V/440V/530Vac	0-24V/48Vdc
Switching current	25A-40A-50A-75A-100A	12A-20A-40A-50A-80A-100A	2A-4A-5A	3A-4A-5A
Control voltage	4-20mA/0-10Vdc	4-32Vdc	5V/12V/24V/4-15V/15-32Vdc	5V/12V/24Vdc
Peak voltage	1200V	30V-50V-100V-200V-500Vdc	600V-800V-1200V	33V-60V
Mounting method	Panel/DIN	Panel	PCB/DIN	PCB
Built-in protection	RC+VDR	Diode	RC/VDR	-
Protection level	IP00/IP20	IP00	IP00	IP00
Input indication	LED indication	LED indication	-	-

02

Two Phase

	CR2V	CR2S
Switching voltage	48-280V/530V/660Vac	48-440Vac
Switching current	25A-40A-50A	25A-40A-50A
Control voltage	4-32V/4-15V/15-32Vdc	4-15Vdc/15-32Vdc
Peak voltage	600V-1200V-1600V	800V
Mounting method	Panel	Panel
Built-in protection	RC	RC
Protection level	IP20	IP00
Input indication	LED indication	-

Three Phase

	CR3T	CRM3T	CRM2TT	CR3Sxx
Switching voltage	48-440V/530V/660Vac	48-530V/660Vac	48-530V/660Vac	180-530Vac
Switching current	12A-25A-40A-50A-75A	12A-25A-40A-50A-75A	3.3A-6.6A-9.0A	50A-75A
Control voltage	4-32Vdc	4-32Vdc	10-32Vdc	4-20mA/0-5V/0-10Vdc
Peak voltage	800V-1200V-1600V	1200V-1600V	1200V-1600V	1200V
Mounting method	Panel	Panel	Panel	Panel
Built-in protection	RC/VDR	RC+VDR	RC+VDR	RC+VDR
Protection level	IP00	IP00	IP00	IP20
Input indication	LED indication	LED indication	LED indication	LED indication



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*New
products*

Current
Monitoring
Module

03



Description

The current monitoring module associated with solid state relay CR1U allows to control and to make a diagnostic with one or more loads(maximum five loads in). It allows to detect open mains, open load or partial load break or a short-circuited SCR. The module monitors continuously the load current by current transformer and compare with a preset current value. The instruction current value(teach current) is validated by the operator with the "TEACH" push button(placed in the front) or with the External teach input (Logic Input). If the load current is lower than -16% of teach current($0.84 * I_{teach}$), it means there is a partial load break.

Main features

Supply power	8-30Vdc
Input control range	4-32Vdc
External teach input range	4-32Vdc
Diagnostic output range	8-30Vdc 0.1A
Nominal monitoring range	2-40A
Max monitoring loads	5
Alarm threshold	$0.84 * I_{teach}$
Diagnostic output mode	PNP/NPN
Connection control	Screw Pluggable
Current transformer hole diameter	9mm
Conformity	IEC/ EN60947-4-3
Housing Material	PA66
Weight	65g

04



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Fuses



Low voltage general purpose fuses

	AG10/AG14/AG22	AM10/AM14/AM22	AG01/AG02/AG03
Voltage range	690Vac	690Vac	440Vac
Current range	0.5-125A	0.5-125A	2-100A
Characteristic	gG/gL	aM	gG/gL
I.R. AC (IEC)	100/200KA	100KA	50/100KA
Body Style	Cylindrical	Cylindrical	D0
Product Size(mm)	10x38/14x51/22x58	10x38/14x51/22x58	01/02/03

	AM01/AM02/AM03	AG17B	AM17B
Voltage range	440Vac	690Vac	690Vac
Current range	2-100A	4-630A	4-630A
Characteristic	aM	gG/gL	aM
I.R. AC (IEC)	50/100KA	120KA	120KA
Body Style	D0	NH Square body	NH Square body
Product Size	01/02/03	00C/00/0/01/02/03	00C/00/0/01/02/03

Semiconductor fuses

	AS17B	AS17C	AS17D	AS17E
Voltage range	690Vac	69Vac	690Vac	690Vac
Current range	4-630A	40-2000A	40-1250A	10-400A
Characteristic	aR	aR	aR	aR
I.R. AC (IEC)	120/200KA	100/200KA	100/200KA	120/200KA
Body Style	NH Square body	European Square body	European Square body	European Square body
Product Size	00C/00/0/01/02/03	00/01/02/03	00/01/02/03/04	01/02

	AS10/AS14/AS22	AS01/AS02/AS03	AS09/AS17/AS38	AS25B/AS31B/AS51B
Voltage range	690Vac	440Vac	690Vac/600Vdc	1000Vac/700Vdc
Current range	0.5-125A	2-100A	6-710A	35-2000A
Characteristic	aR	aR	aR	aR
I.R. AC (IEC)	100/200KA	50/100KA	100/200KA	100KA
Body Style	Cylindrical	D0	British Standard BS88	North American cylindrical
Product Size(mm)	10x38/14x51/22x58	01/02/03	8.5x54.8/17x48/38x50	Ø25/31/51/63/89

Solar/Medium Voltage/Special purpose fuses

	APJ/APJB	AP10/AP14/AP14L	CNL/CNN	AR/AT/AE
Voltage range	1000Vdc	1000V/1500Vdc	80Vac/125Vac/80Vdc	3.6-36KVac
Current range	50-630A	1-32A	35-800A	10-400A
Characteristic	gPV	gPV	aR	-
I.R (IEC)	50KA	30KA	2500A	50KA
Body Style	NH Square body	Cylindrical	Lift Truck fuse	Cylindrical
Product Size(mm)	00/01/02/03	10x38/14x51/10x85	81x22.5x14	Ø 25/51/76



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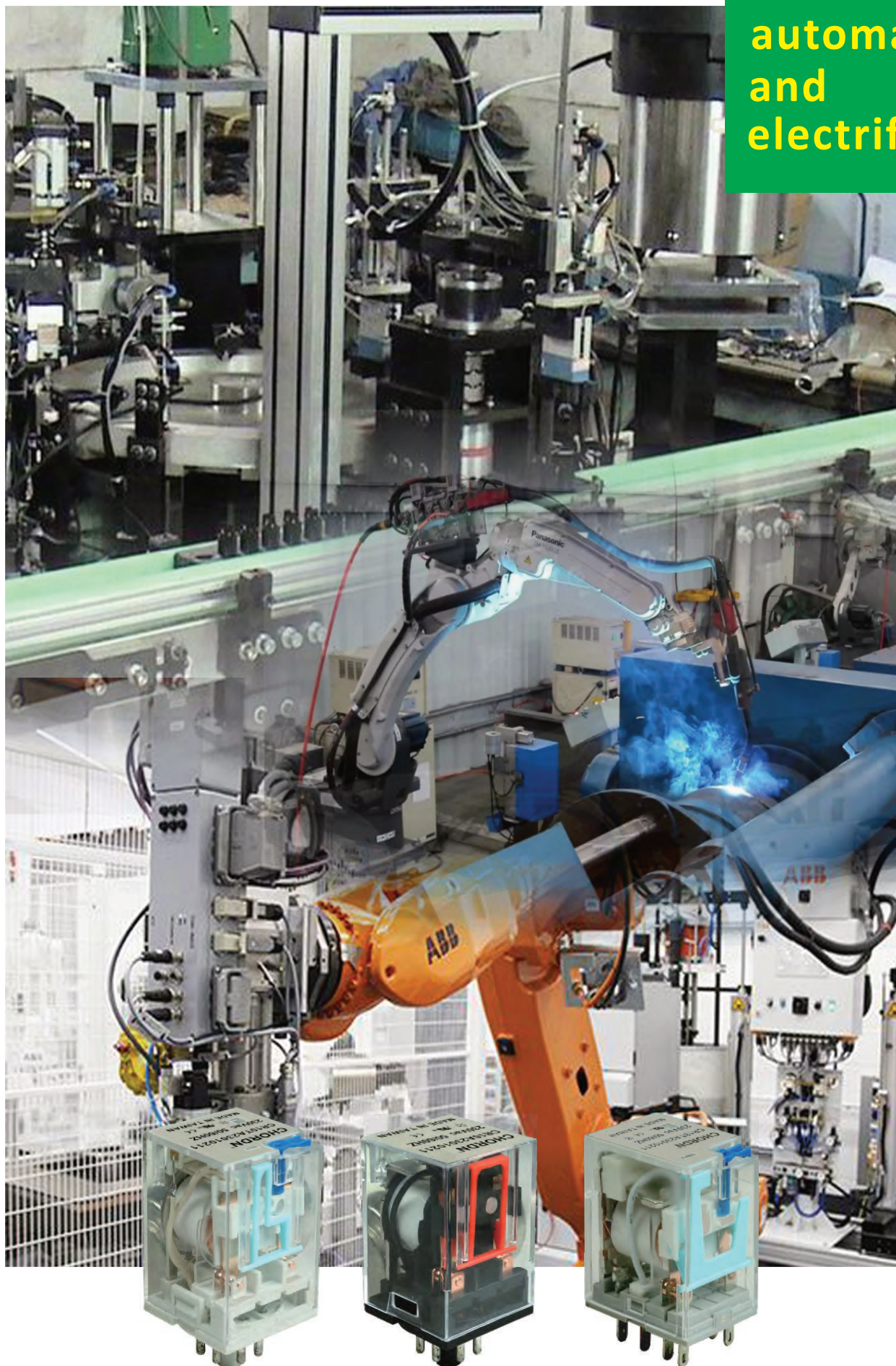
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Relays

07



Description

Chordn provides various electromechanical relays in 6 different types and each with multiple sizes for extremely wide application. Our products are compatible to wide control voltage, different contact types and switching power. Standard with environment protection(halogen-free) is adopted.

Main features

	CR10	CR13
Contact configuration	DPDT/3PDT	DPDT
Contact Rated Voltage	250Vac/28Vdc	250Vac/30Vdc
Contact Rated Current	10A	10A
Coil Rated Voltage	AC: 6V-12V-24V-48V-110V-230V-240V DC: 6V-12V-24V-48V-110V	AC: 6V-12V-24V-48V-110V-230V-240V DC: 6V-12V-24V-48V-110V
Mounting method	Socket mounting	Socket mounting/PCB/Flange mounting
Option	Test button LED indication Rectifier diode protection Varistor protection	LED indication Rectifier diode protection Varistor protection

08

	CR18	CR15
Contact configuration	DPDT/3PDT/4PDT	SPDT/DPDT
Contact Rated Voltage	250Vac/30Vdc	250Vac/30Vdc
Contact Rated Current	Please see the technical documents	12A/8A
Coil Rated Voltage	AC: 6V-12V-24V-48V-110V-230V-240V DC: 6V-12V-24V-48V-110V	DC: 6V-9V-12V-24V-48V-100V
Mounting method	Socket mounting/PCB/Flange mounting	Socket mounting
Option	Test button Long lifespan type LED indication Rectifier diode protection Varistor protection	Test button

	CR14	CR41
Contact configuration	SPDT/DPDT	SPDT-ON/SPDT
Contact Rated Voltage	250Vac/30Vdc	250Vac/30Vdc
Contact Rated Current	10A/16A/5A	6A
Coil Rated Voltage	DC: 3V-5V-6V-9V-12V-24V-48V-60V-110V	DC: 5V-6V-9V-12V-18V-24V-48V-60V
Mounting method	Socket mounting/PCB/Flange mounting	Socket mounting



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Monitoring
relays

09

Description

Our monitoring relays are mainly used to monitor the phase sequence-loss, over-undervoltage and current of the power supply system. When the system fails or exceeds the set value, the relay will alarm and output. These monitoring relays are fitted with standard 35mm DIN-rail mount housing, easy to install.

3-Phase

	HMPA5A344	HMPA5C348	HMPB7348	HMPB5A344
Measuring range	208 to 480VAC(±15%)	380 to 480 VAC(±15%)	380 to 480 VAC(±15%)	208 to 480 VAC(±15%)
Output	SPDT relay	SPDT relay	SPDT relay	SPDT relay
Supply voltage	Self powered 208 to 480 VAC(±15%)	Self powered 380 to 480 VAC(±15%)	Delta voltage 380-480VAC, Star voltage 220-277VAC	Self powered 208 to 480 VAC(±15%)
Function	LED indication for relay	LED indication for relay	LED indication for relay	LED indication for relay
	Phase sequence	Phase sequence	Phase sequence	Phase sequence
	Phase loss	Phase loss	Phase loss	Phase loss
		Under voltage	Over and under voltage	Over and under voltage
			Adjustable delay function (0.1 to 30 s)	Adjustable delay function (0.1 to 30 s)
			Upper limits adjustable, Lower limits adjustable	Upper limits adjustable, Lower limits adjustable

Current

	HMIA5C2420	HMIA5C2450	HMIA5C24100
Measuring range	2-20 AAC	5-50 AAC	10-100 AAC
Max.current	40 AAC	100 AAC	150 AAC
Output	Solid state	Solid state	Solid state
Supply voltage	Self powered	Self powered	Self powered
Function	Over current	Over current	Over current
	Adjustable set point	Adjustable set point	Adjustable set point
	LED indication	LED indication	LED indication

Voltage

	HMUA5B324	HMUA5B348
Measuring range	12 to 24 VDC(±15%)	48 VDC(±20%)
Supply voltage	Self powered 12 to 24 VDC(±15%)	Self powered 48 VDC(±20%)
Output	SPDT relay	SPDT relay
Function	DC under voltage, adjustable hysteresis, Measures power supply, LED indication	DC under voltage, adjustable hysteresis, Measures power supply, LED indication



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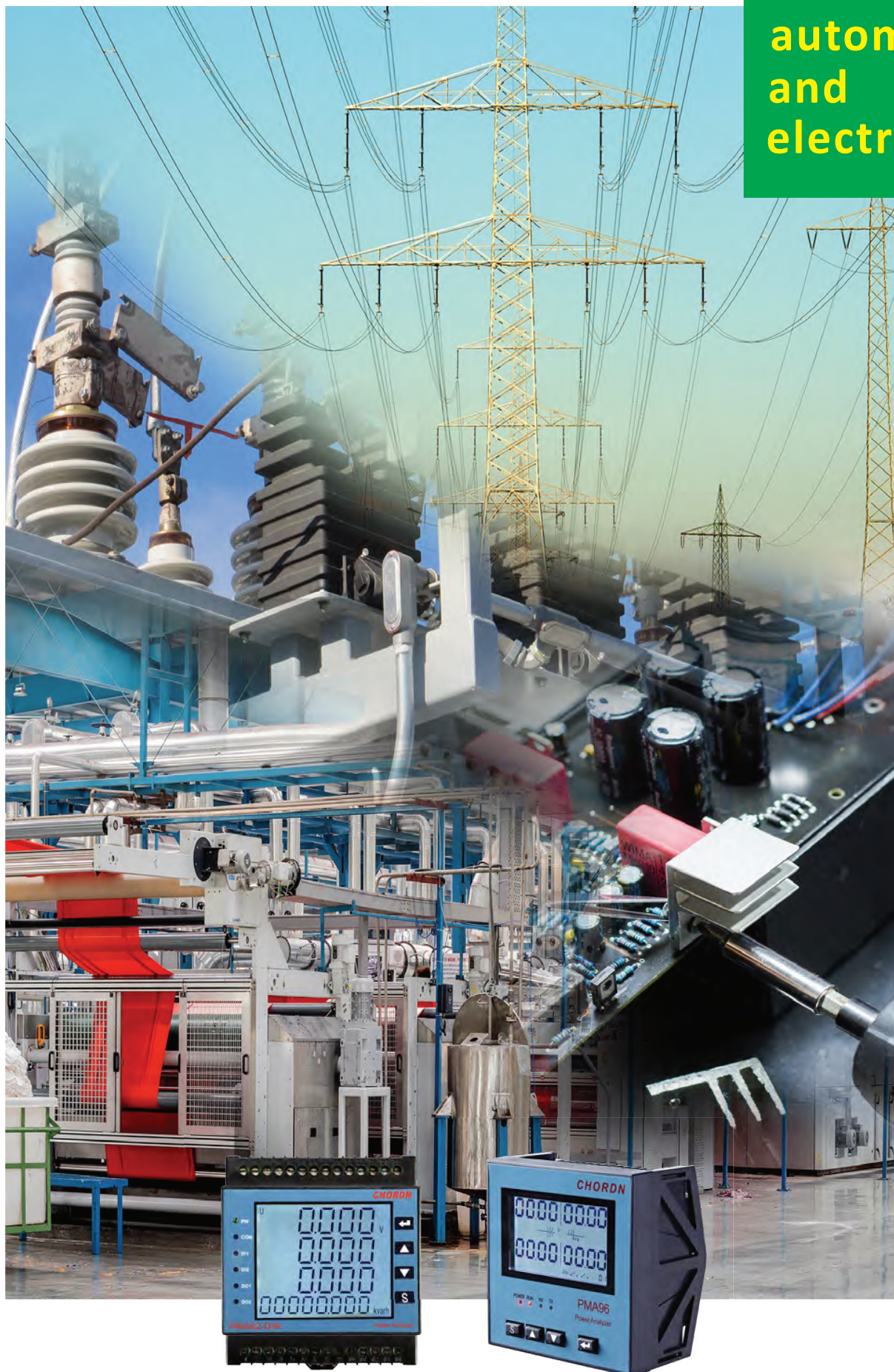
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Power analyzers

11



Description

Three phase multi-function smart meter is mainly used in three-phase power system to measure voltage, current, zero sequence current, frequency, power factor, active power, reactive power, apparent power, active-energy and reactive-energy and so on. It has over and undercurrent, voltage alarm output or relay output, Four Q measurement and other functions. LCD panel display, panel mounting or DIN-rail mounting as option. It can form a large and medium-sized data acquisition system and monitoring by communicating with the main computer through RS485 communication interface.

Main features

Product series	PMA96	PMA82
Power supply	230VAC, 18-60VAC/DC, 90-160VAC/DC	230VAC, 18-60VAC/DC, 90-260VAC/DC
Measurements	VLL, VL-N, VL-Lavg, VL-Navg, VLN alarm, AL, Aalarm, PF, PFΣ, W, WΣ, VAR, VARΣ, VA, VAΣ, KWH, KVARH, Hz	VLL, VL-N, VLN alarm, AL, AN, Aalarm, PF, PFΣ, W, WΣ, VAR, VARΣ, VA, VAΣ, KWH, KVARH, Hz
Measuring range	VLL(0-400V), An(0-5A)	VLL(0-400V/690V), An(0-5A)
System	1P, 2P, 3P, 3P+N	1P, 2P, 3P, 3P+N
Accuracy	±0.5F.S(current/voltage)	±0.2F.S(current/voltage)
Alarm output	Relay	Relay
Communication	RS485, MODBUS RTU	RS485, MODBUS RTU
Safety standards	EN60664, EN61000-6-2, EN50084-1	EN60664, EN61000-6-2, EN50084-1
Protection degree	IP20	IP20
Mounting	Panel	DIN-rail
Housing material	ABS, self-extinguishing	ABS, self-extinguishing
Working temperature	-10 - +50°C	-10 - +50°C
Conformity	CE	CE
Weight	approx. 400g	approx. 300g

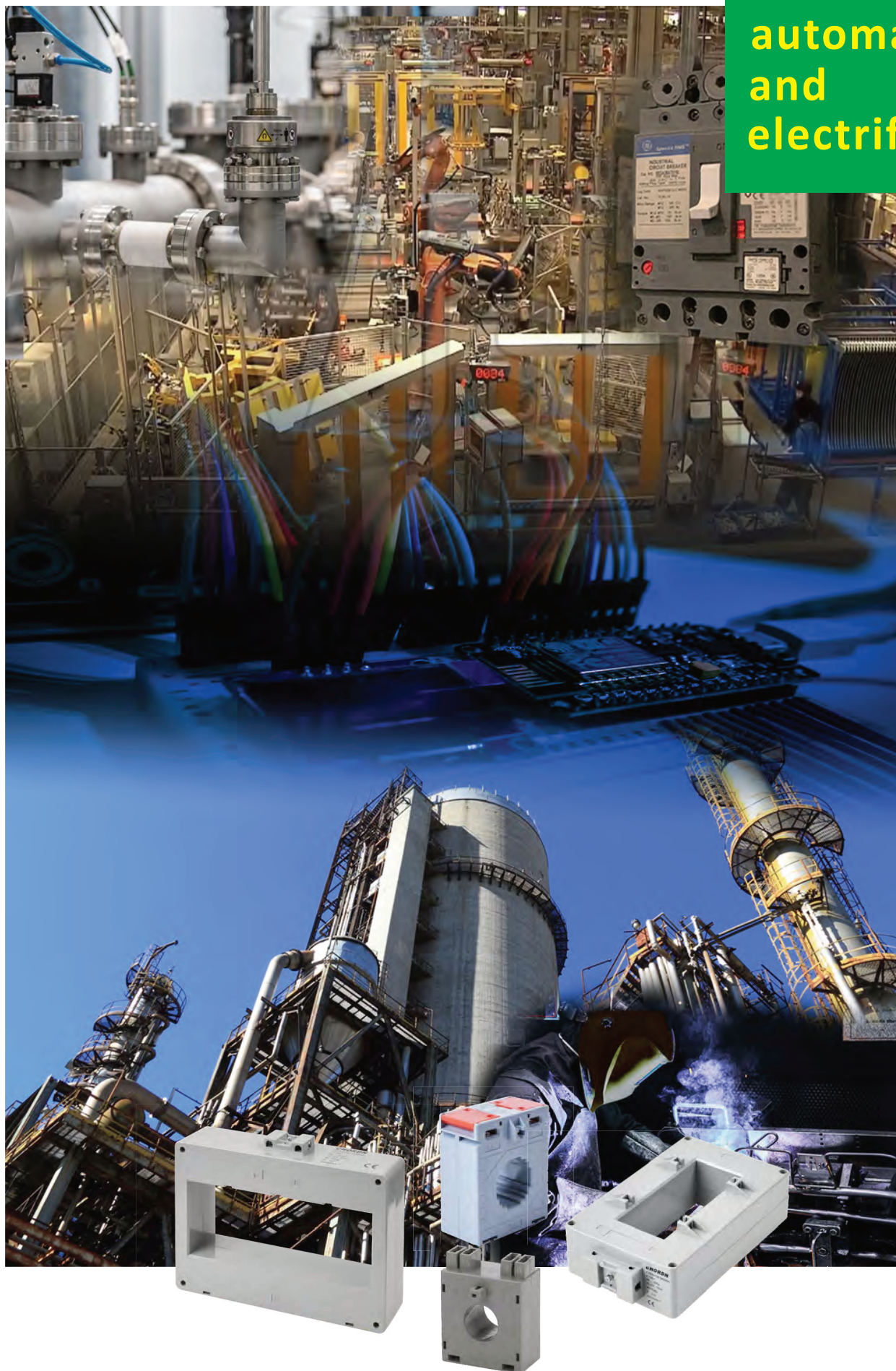
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Current
transformers

13



Description

Cable/Bus-bar type current transformers have DIN-rail/busbar and panel mounting facilities. Rated primary currents from 50A to 6000A(depends on the model). Secondary current is available in 5A or 1A. The accuracy of the CT is available in 0.2S, 0.2, 0.5S, 0.5 and 1.0(depends on the model).

Main features

Phase number	Single phase
Primary current	50-6000A
Secondary current	5A/1A
Accuracy class	0.2S, 0.5S, 0.2, 0.5, 1.0
Rated burden	1.5-10VA
Insulation class	E
Max. system voltage	0.72KV
Operating frequency	45 to 65 Hz
Short-time current rating	40 In /1 s
Extended current rating	120%
Protection degree	IP20
Mounting	DIN-rail/ bus-bar and panel mounting
Housing material	ABS, self-extinguishing
Working environment temperature	-25 - +50°C
Conformity	IEC/EN60044-1
Weight	approx. 250-1000g



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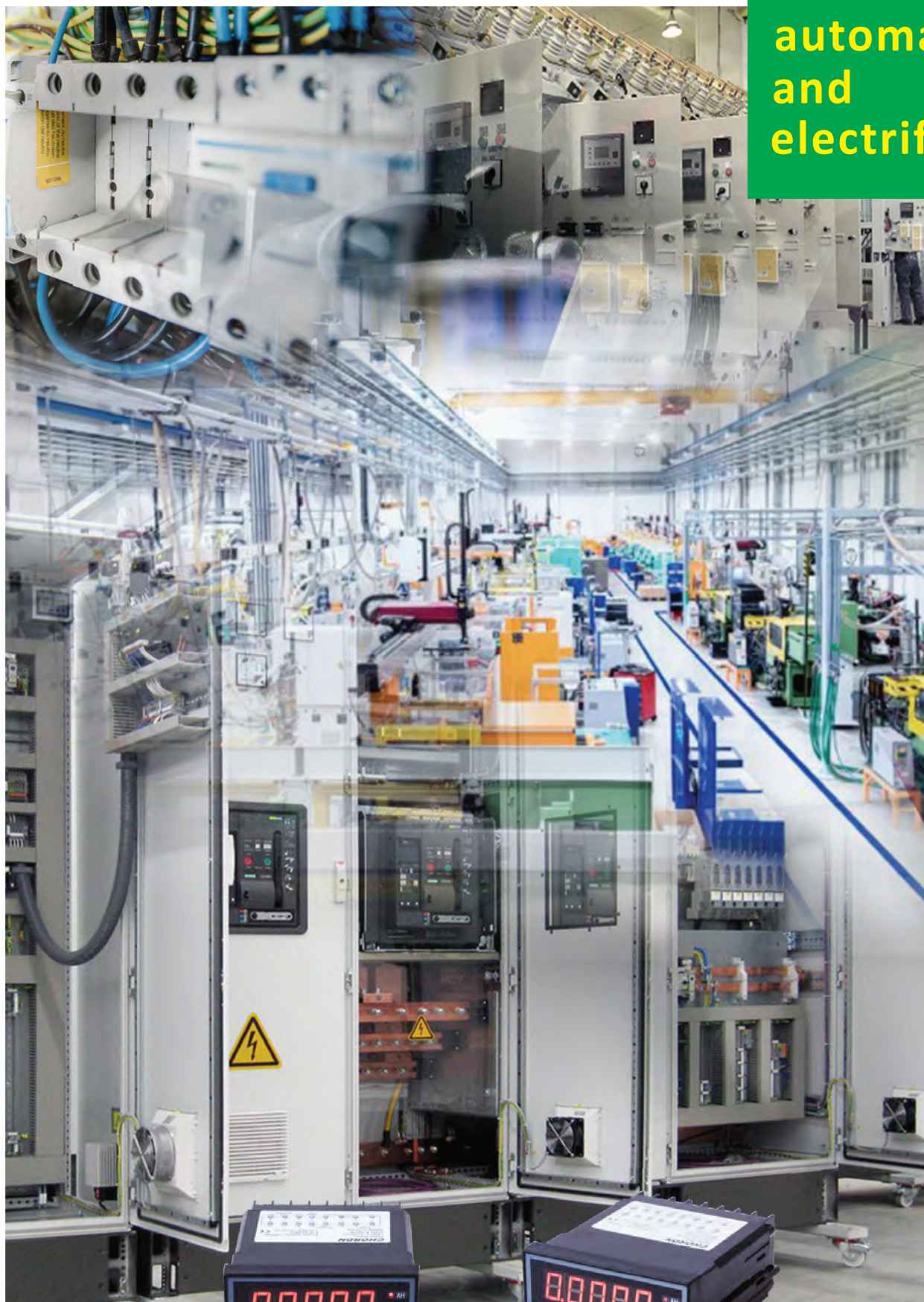
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Digital panel
meters

Description

HDM-C series digital panel meter with 5 digit LED indicator and controller is suitable for the temperature, humidity, pressure, flow, liquid level and other physical parameters measurement, display, alarm, transmission and communication. It is widely used in electric power, chemical industry, metallurgy, food processing, mechanical manufacturing and other fields.

Main features

Power supply	100-240VAC/10-24Vac/dc
Input signal	K, S, R, B, N, E, J, T, PT100, Cu100, Cu50, BA1, BA2, G53, DC4-20mA, 0-10mA, 0-20mA, 0-5V, 1-5V, 0-10V, mV.
Accuracy	0.2%fs
Sampling rate	5times/s
Output signal	4-20mA, 0-10mA, 0-20mA or 0-5V, 1-5V, 0-10V, -5-+5V, -10- +10V
Protocol	Modbus RTU RS485
Display range	-19999-45000
Display	4 1/2 DGT, 7 segments, height 14.2mm, colour: red
Alarm output contacts	250VAC, 3A(Resistive loads)
Alarm outputs	Upper alarm, Lower alarm, Upper deviation alarm, Lower deviation alarm, Absolute value alarm
Panel Cut-out	44.5x91.5mm
Housing material	ABS, self-extinguishing
Working environment temperature	-5 - +50°C
Conformity	IEC61000-4-2, IEC61000-4-4, IEC61000-4-5
Weight	approx. 340g

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**Wind Velocity
Sensors**

17

Description

The HWS14 air velocity transmitter series is designed for highly accurate measurement of lowest air velocities. It is the ideal solution for laminar flow control and special ventilation applications. This series provides current, voltage signal or RS485 output for users to choose according to their specific requirements. In addition, the HWS14 series is available in models with LCD display and a separate sensor probe. Flange mounting, easier and more economical.

Main features

Power supply	24Vac/dc or 12Vac/dc
Working range	0-1m/s, 0-2m/s, 0-5m/s, 0-10m/s, 0-15m/s, 0-20m/s, 0-30m/s, 0-40m/s, 0-50m/s
Accuracy	0.2%fs
Response time	0.2s
Output signal	0-10Vdc, 4-20mA, 0-5Vdc, RS485
Protocol	Modbus RTU, RS485
Display type	LCD module(optional)
Rod diameter	14mm
Mounting	Flange
Protection degree	IP20
Probing rod material	Aluminum/Polymer resin
Housing material	ABS, self-extinguishing
Working environment temperature	-5 - +70°C
Conformity	EN61326-1, EN61326-2-3
Weight	approx. 100g

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Dedicated
smoke
detectors for
electrical
cabinet



Description

A dedicated smoke detectors for electrical cabinet is a device that senses smoke, typically as an indicator of fire, and issues sound and light alarm signal in time. Using CPU control, it can intelligently detect the smoke concentration of fire. When the smoke concentration exceeds the preset alarm threshold, the detector will be triggered into the alarm state and the relay gives response at the same time. The alarm signal will be presented in the form of changeable action of the relay contacts and has the alarm locking function. Resetting the alarm can only be done through a short power off. In addition, chordn smoke detector is fitted with relay output and RS485 communication. It's particularly suitable for those scene where the fire is likely to generate a large amount of smoke but no smoke under normal situation, such as computer rooms, communications machine rooms, power distribution cabinets and so on.

Main features

Product series	HSRV1BT
Power supply	9-30VDC(12/24VDC)
Current	Monitoring: 1mA@12VDC 5mA@24VDC Alarm: 30mA@12VDC 35mA@24VDC
Relay output	1CO(SPDT)/RS485
Contact rating	30VDC 1A
Alarm output	Relay
Indicator	Monitoring: red led flash Alarm: red led on
Mounting height	≤12m
Alarm volume	80dB@3m
Overtemperature	57°C(typical)
Mounting	Panel
Dimension	65x65x39mm
Housing material	ABS, self-extinguishing
Working temperature	-10 - +65°C
Ambient humidity	≤95%
Conformity	CE
Weight	approx. 64g



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Transformers

Description

An isolating transformer is a transformer where primary and secondary windings are electrically separated by a double or reinforced insulation, in order to minimize(in the secondary-side powered circuit) any risk due to simultaneous accidental contacts with the ground or with active parts or masses that can be energized in case of failure of the main insulation. Single-phase isolating-/control-transformer designed and tested according to EN61558-2-4. Separate insulated windings and protected against dust, humidity and corrosion through complete impregnation in heat tempered varnish.

Main features

Phase number	Single-phase
Primary voltage	230V, 380V, 415, 440V, 460Vac
Secondary voltage	6V, 12V, 24V, 36V, 48V, 115V, 230Vac
Rated power	40-2500VA
Frequency	47-63Hz
Insulating voltage	2.5kVAC RMS
Insulation class	B (130°C)
Varnished wire	Copper wire
Safety standards	EN61558-2-4
Ambient temp	40°C
Protection	IP00



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OptoMOS

23



Description

An OptoMOS is a semiconductor device with a LED as an input and MOSFET as an output. It is used in various fields to improve device reliability and reduce size.

Obviously the OptoMOS are different to the conventional electro-mechanical relays. OptoMOS are classified as semiconductor devices that have no moving contacts, therefore they are superior to conventional electro-mechanical relays in life expectancy and reliability of contacts, operation speed, and their sizes.

But they also distinguish themselves from other switching solutions that utilize photo-couplers, photo- transistors etc. OptoMOS have MOSFET for output, therefore they are the most suitable devices for small analog signal switching.

Main features

Model number	Input	Load voltage	Continuous Load current	Contact type	Turn on time	Turn off time
CRP0112	15mA 1.3V	60VDC	1A	NC	4ms	1ms
CRP2112		60VDC	1A/1.2A	CO	4ms	4ms
CRP1121		60VAC/DC	1A	NO	4ms	4ms
CRP1221		60VAC/DC	2A	NO	2ms	1ms
CRP1131		100VAC/DC	1A	NO	4ms	4ms
CRP10352		500VAC/DC	0.3A	NO	2ms	1ms
CRP10171		600VAC/DC	0.1A	NO	2ms	2ms
CRP1M281		1500VDC	0.02A	NO	1ms	1ms
CRP1211		60VDC	2A	NO	2ms	1ms
CRP141		60VDC	4A	NO	5ms	2ms
CRP1101		60VDC	10A	NO	5ms	2ms
CRP126		600VDC	2A	NO	5ms	2ms
CRP127		600VAC/DC	2A	NO	5ms	2ms

→ Facing the competition

For many years, chordn hasn't stop evolving while the team has remained the same. A dedicated team close to its customers and partners, ready to take on any challenge, in the midst of a severe global competition.

At chordn, we have succeeded in achieving and maintaining efficiency and high quality level of production in Italy.

→ Other Catalogues and leaflets available



→ Approved & recognized

UL: USA Laboratory



CE: We manufacture our products in compliance with standard & European Directives



RoHS: We manufacture our products in compliance with RoHS Directives



VDE: German Laboratory



CB: We manufacture our products in compliance with CB Directives



→ All our technical data-sheets are available in our website:
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