

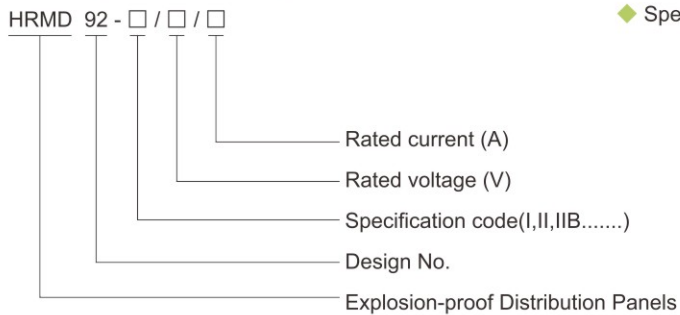
## Distribution Boxes

### HRMD92 Series Explosion-proof Distribution Panels



- ◆ Explosion protection to
  - CENELEC
  - IEC
  - NEC
- ◆ Can be used in
  - Zone 1 and Zone 2
  - Zone 21 and Zone 22
  - Class I, Zone 1 and Zone 2
  - Class I, Division 1, Groups B, C, D
- ◆ Flameproof enclosure (Ex d IIB+H<sub>2</sub>), which can be used as feed distribution equipment in control and distribution system (such as distribution box, switch box of main circuit, control box, terminal box or motor starting box etc.)
- ◆ Enclosure: stainless steel.
- ◆ Equipped with specialized hinge structure, which can prevent the flameproof joints from damage when opening and closing the panels, and greatly prolong the service life of box.
- ◆ The boxes can be combined and installed freely to save space and meet the requirements of various distribution systems.
- ◆ Special requirements on request.

#### ■ Catalogue number logic



# Zones 1 & 2; 21 & 22

## Distribution Boxes

### HRMD92 Series Explosion-proof Distribution Panels

Technical data	
Explosion-proof Distribution Panels <b>HRMD92-□/□/□</b>	
<b>Explosion protection</b>	
Global (IECEX)	IECEX CML19.0176X
Gas and dust	Where the Spec. type is: I, II, IIB ... VIIB Ex db IIB+H <sub>2</sub> T□ <sup>1</sup> ) Gb Ex db [ib] IIB+H <sub>2</sub> T□ <sup>1</sup> ) Gb Ex tb IIIC T□ <sup>1</sup> ) Db IP66 Where the Spec. type is: VIII, VIIIB, IX, IXB Ex db IIB T□ <sup>1</sup> ) Gb Ex db [ib] IIB T□ <sup>1</sup> ) Gb Ex tb IIIC T□ <sup>1</sup> ) Db IP66
Europe (ATEX)	CML 19 ATEX 1482X
Gas and dust	Where the Spec. type is: I, II, IIB ... VIIB ⊕ II 2 G Ex db IIB+H <sub>2</sub> T□ <sup>1</sup> ) Gb ⊕ II 2 G Ex db [ib] IIB+H <sub>2</sub> T□ <sup>1</sup> ) Gb ⊕ II 2 D Ex tb IIIC T□ <sup>1</sup> ) Db IP66 Where the Spec. type is: VIII, VIIIB, IX, IXB ⊕ II 2 G Ex db IIB T□ <sup>1</sup> ) Gb ⊕ II 2 G Ex db [ib] IIB T□ <sup>1</sup> ) Gb ⊕ II 2 D Ex tb IIIC T□ <sup>1</sup> ) Db IP66 <sup>1</sup> See Selection table, P6/28-29
<b>Certificates</b>	IECEX; ATEX; CU-TR
<b>Conformity to standards</b>	EN 60079-0, EN 60079-1, EN 60079-11, EN 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-11, IEC 60079-31
<b>Enclosure material</b>	Stainless steel.
<b>Exposed fastener</b>	Stainless steel
<b>Built-in components</b>	Ammeters voltmeters, power meters, tachometers temperature control meters and other meters, control switches, disconnecting switches, Moulded Case Circuit Breakers (MCCB), Miniature Circuit Breakers(MCB), AC contactors, thermal relays, intermediate relays, time relays, control transformers, DC power supplies, current transformers, surge protectors, PLCs, fuses, soft starters, frequency converters, terminals, bus bars, resistors, light-operated switches, time controllers, optical fiber control boxes, magnet valves, analytical instruments, heaters, self-regulation trace heating cables, display screens, magnetic ballasts of HID light sources, electronic ballasts of fluorescent lamps, drivers of LED light sources, emergency devices of HID light sources, emergency devices of fluorescent lamps, emergency devices of LED light sources, safety barriers, integrated protectors of motors, lighting building controllers, lighting energy saving controllers, fire monitoring controllers, temperature controllers, humidity controllers, current monitors, voltage monitors, motor protection switches, dual power transfer switches, counters, timers, solid state relays, diode modules, industrial personal computers, UPS, batteries.
<b>Rated voltage</b>	Max. 1000V AC 50/60Hz Max. 1500V DC
<b>Rated current</b>	Max. 2000A
<b>Degree of protection</b>	IP66
<b>Ambient temperature</b>	-60°C~+60°C(+40°C)
<b>Cable entries</b>	Standard M□×1.5 plug (the size of entry hole should be processed in accordance with actual requirements), NPT □ plug on request.
<b>Cable gland (optional)</b>	DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P6/24~39.
<b>Entry direction</b>	Bottom
<b>Mounting</b>	Surface type (standard) Pedestal type (optional)



## Distribution Boxes

### HRMD92 Series Explosion-proof Distribution Panels

Selection table for max. dissipated power

Ta=60°C	HRMD92 with full metal cover without glass					
	T4(T130°C)		T5(T95°C)		T6(T80°C)	
Type	Power (W)	T Rise (K)	Power (W)	T Rise (K)	Power (W)	T Rise (K)
HRMD92-I	101	70	51	35	22	17
HRMD92-II	101	70	51	35	25	17
HRMD92-IIB	101	70	51	35	25	17
HRMD92-III	145	70	73	35	31	17
HRMD92-IIIB	168	70	84	35	41	17
HRMD92-IV	148	70	74	35	36	17
HRMD92-IVB	188	70	94	35	46	17
HRMD92-V	190	70	95	35	40	17
HRMD92-VB	239	70	119	35	56	17
HRMD92-VI	279	70	139	35	55	17
HRMD92-VIB	288	70	144	35	70	17
HRMD92-VII	279	70	139	35	55	17
HRMD92-VIIB	299	70	149	35	72	17
HRMD92-VIII	686	70	343	35	167	17
HRMD92-VIIIB	743	70	371	35	180	17
HRMD92-IX	975	70	488	35	237	17
HRMD92-IXB	1149	70	575	35	279	17



Ta=60°C	HRMD92 with metal cover with glass					
	T4(T130°C)		T5(T95°C)		T6(T80°C)	
Type	Power (W)	T Rise (K)	Power (W)	T Rise (K)	Power (W)	T Rise (K)
HRMD92-I	101	70	51	35	19	17
HRMD92-II	101	70	51	35	20	17
HRMD92-IIB	129	70	65	35	26	17
HRMD92-III	150	70	75	35	31	17
HRMD92-IIIB	155	70	77	35	38	17
HRMD92-IV	215	70	108	35	38	17
HRMD92-IVB	224	70	112	35	49	17
HRMD92-V	187	70	93	35	37	17
HRMD92-VB	251	70	125	35	61	17
HRMD92-VI	266	70	133	35	71	17
HRMD92-VIB	319	70	160	35	79	17
HRMD92-VII	290	70	145	35	71	17
HRMD92-VIIB	313	70	157	35	76	17
HRMD92-VIII	709	70	354	35	172	17
HRMD92-VIIIB	780	70	390	35	189	17
HRMD92-IX	953	70	476	35	231	17
HRMD92-IXB	1206	70	603	35	293	17

## Distribution Boxes

### HRMD92 Series Explosion-proof Distribution Panels

Ta=40°C	HRMD92 with metal cover without glass					
	T4(T130°C)		T5(T95°C)		T6(T80°C)	
Type	Power (W)	T Rise (K)	Power (W)	T Rise (K)	Power (W)	T Rise (K)
HRMD92-I	130	90	79	55	43	37
HRMD92-II	130	90	79	55	53	37
HRMD92-IIB	130	90	79	55	53	37
HRMD92-III	187	90	114	55	61	37
HRMD92-IIIB	216	90	132	55	89	37
HRMD92-IV	190	90	116	55	89	37
HRMD92-IVB	242	90	148	55	99	37
HRMD92-V	244	90	149	55	78	37
HRMD92-VB	307	90	188	55	111	37
HRMD92-VI	358	90	219	55	147	37
HRMD92-VIB	371	90	226	55	152	37
HRMD92-VII	358	90	219	55	108	37
HRMD92-VIIB	384	90	235	55	158	37
HRMD92-VIII	882	90	539	55	362	37
HRMD92-VIIIB	955	90	584	55	393	37
HRMD92-IX	1254	90	766	55	515	37
HRMD92-IXB	1478	90	903	55	607	37

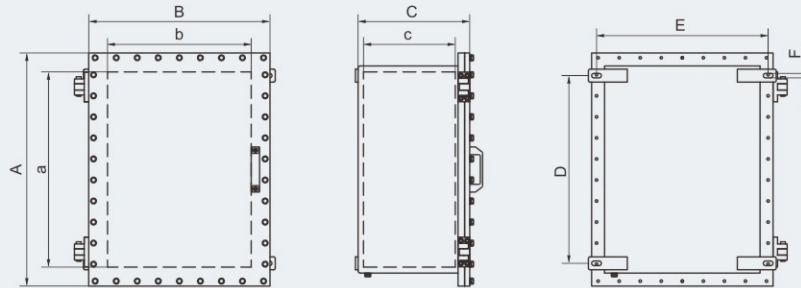
Ta=40°C	HRMD92 with full metal cover with glass					
	T4(T130°C)		T5(T95°C)		T6(T80°C)	
Type	Power (W)	T Rise (K)	Power (W)	T Rise (K)	Power (W)	T Rise (K)
HRMD92-I	130	90	79	55	19	37
HRMD92-II	130	90	79	55	20	37
HRMD92-IIB	166	90	101	55	26	37
HRMD92-III	193	90	118	55	31	37
HRMD92-IIIB	199	90	122	55	38	37
HRMD92-IV	277	90	169	55	38	37
HRMD92-IVB	288	90	176	55	49	37
HRMD92-V	240	90	147	55	37	37
HRMD92-VB	322	90	197	55	61	37
HRMD92-VI	342	90	209	55	71	37
HRMD92-VIB	411	90	251	55	79	37
HRMD92-VII	373	90	228	55	71	37
HRMD92-VIIB	403	90	246	55	76	37
HRMD92-VIII	911	90	557	55	172	37
HRMD92-VIIIB	1003	90	613	55	189	37
HRMD92-IX	1225	90	749	55	231	37
HRMD92-IXB	1551	90	948	55	293	37



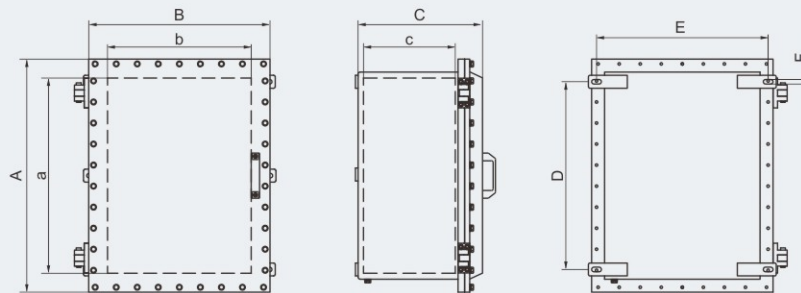
## Distribution Boxes

### HRMD92 Series Explosion-proof Distribution Panels

Dimension drawings (all dimensions in mm) - subject to alteration



HRMD92-I/□/□ ~ HRMD92-VIIB/□/□



HRMD92-VIII/□/□ ~ HRMD92-IXB/□/□

Version	External dimension			Internal dimension			Mounting dimension			Weight of enclosure (kg)
	A	B	C	a	b	c	D	E	F	
HRMD92-I	250	200	170	192	142	135	150	180	9	15.30
HRMD92-II	300	200	170	242	142	135	200	180	10	17.70
HRMD92-IIB	350	200	170	292	142	163	250	180	10	20.10
HRMD92-III	350	300	200	292	242	168	250	290	10	28.70
HRMD92-IIIB	350	300	270	292	242	238	250	290	10	31.80
HRMD92-IV	450	350	210	362	262	163	330	318	10	44.80
HRMD92-IVB	450	350	280	362	262	233	330	318	10	49.40
HRMD92-V	560	400	210	468	308	163	420	370	14	68.30
HRMD92-VB	560	400	280	468	308	225	420	370	14	73.80
HRMD92-VI	634	434	265	542	342	218	494	404	14	103.50
HRMD92-VIB	634	434	335	542	342	319	494	404	14	112.80
HRMD92-VII	720	560	275	628	468	228	580	530	14	156.10
HRMD92-VIIB	720	560	345	628	468	298	580	530	14	169.30
HRMD92-VIII	980	720	325	884	624	272	650	750	18	329.40
HRMD92-VIIIIB	980	720	425	884	624	372	650	750	18	354.90
HRMD92-IX	1280	900	350	1184	804	297	1060	900	18	589.80
HRMD92-IXB	1280	900	500	1184	804	447	1060	900	18	655.90

Note: For cable entries:

- 1). Please specify the direction and size of each cable entry.
- 2). Cable gland is optional, DQM-II (Ex d) or DQM-III (Ex d) is recommended, please see P6/24~39.

## Distribution Boxes

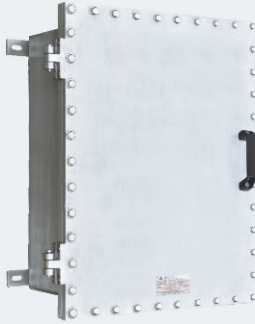
### HRMD92 Series Explosion-proof Distribution Panels

#### HRMD92 Explosion-proof distribution panels for terminal box use

Suitable for terminal boxes of distribution system

Note: 1. HRMD92 terminal boxes have various different terminal arrangement methods.

2. It can be customized in accordance with user's requirements and conforms to the usage limits of conformity certificate. The Max. number of terminals and the Max. number of holes on side can meet the requirements of dissipated power and enclosure mechanical strength.
3. This table is only for reference.



#### HRMD92 Explosion-proof Distribution Panels for control box use

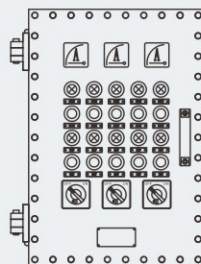
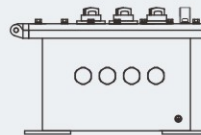
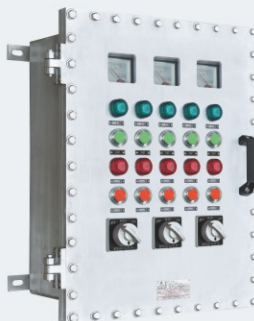
Suitable for control unit of distribution system

Note: 1. HA pushbuttons, HD indicators, HK control switches and BB8050 explosion-proof ammeters/voltmeters etc.in HRMD92 control boxes.

2. HRMD92 control box can be used for on-off operation of circuit. It also can realize the remote control or local control of the start, stop, corotation and inversion of motor. When it is equipped with ammeter, it also can monitor the running of motor and circuit status.
3. It can be customized in accordance with user's requirements and conforms to the usage limits of conformity certificate. The number of cover components and the Max. number of holes on side can meet the requirements of dissipated power and enclosure mechanical strength.



#### Example diagram for control box use



## Distribution Boxes

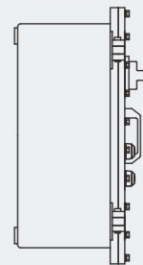
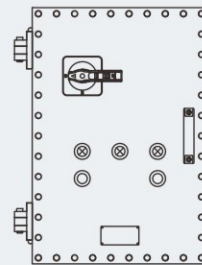
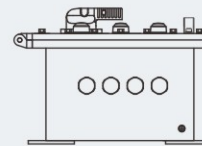
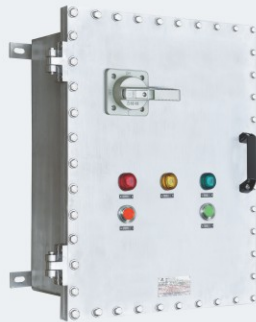
### HRMD92 Series Explosion-proof Distribution Panels

#### HRMD92 Explosion-proof distribution panels for distribution box use

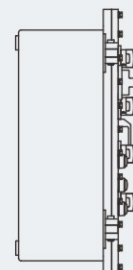
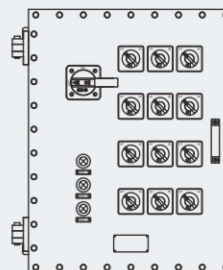
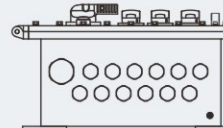
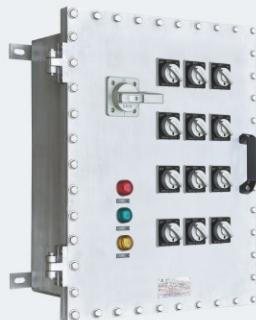
Suitable for power units of distribution system (or intelligent power distribution unit)

- Note: 1. MCB (Miniature Circuit Breaker) or MCCB (Moulded Case Circuit Breaker), AC contactor, thermal overload relay, PLC programmer, soft starter, HA pushbuttons, HD indicators, HK control switches, gateway, switch, serial server, network relay, smart MCB (intelligent miniature circuit breaker) and BB8050 explosion-proof ammeters/voltmeters etc. in HRMD92 distribution boxes.
2. HRMD92 power unit can be used for distribution or on-off of circuit. It also can be used for controlling the start, stop, corotation and inversion of motor and provide comprehensive protection for motor. It can be equipped with two-site control or multi-site control.
3. The HRMD92 distribution box (intelligent type) supports connection to the Warom SCS Safety Engineering Intelligent Management and Control Platform via multiple communication methods, including RJ45, RS485, and optical fiber. It enables centralized local and remote control and monitoring of individual circuits. The HRMD92 distribution box (intelligent type) can continuously collect electrical parameters such as voltage, current, power, and energy from each circuit. It features overload, leakage, overvoltage, undervoltage protection, as well as fault alarm functions, effectively preventing electrical safety hazards. Additionally, it supports the Modbus protocol and custom commands, enabling connectivity to local area networks and the internet. Remote communication and management can be performed via an iPhone app, a PC-based web interface, or a cloud platform.
4. It can be customized in accordance with user's requirements and conforms to the usage limits of conformity certificate. The number of cover components and the Max. number of holes on side can meet the requirements of dissipated power and enclosure mechanical strength.

#### Example diagram for distribution box use

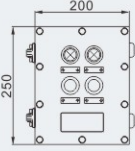
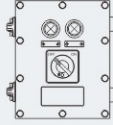
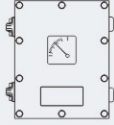
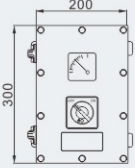
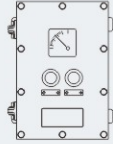

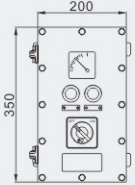
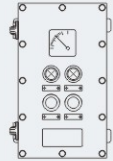
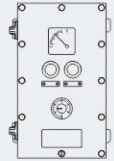
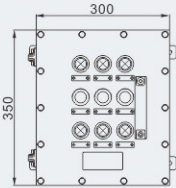
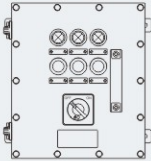
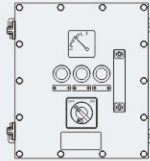
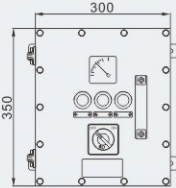
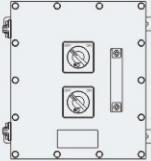
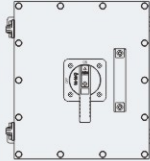
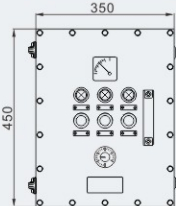
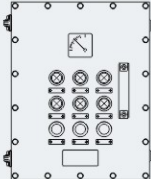
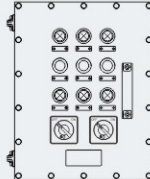
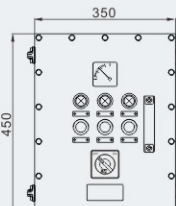
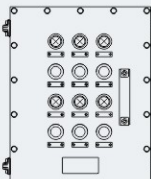
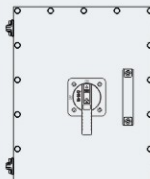


Use for motor starting



Use for illumination (power) distribution

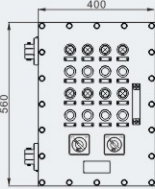
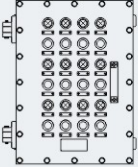
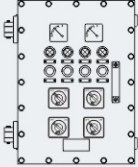
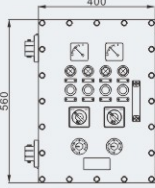
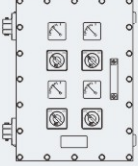
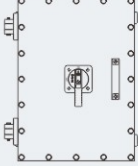
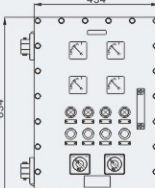
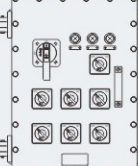
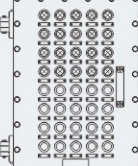
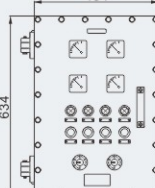
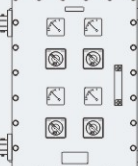
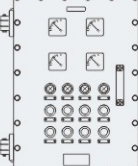
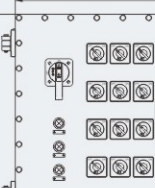


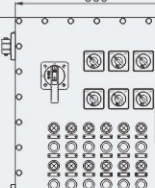
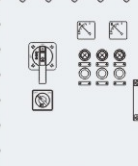
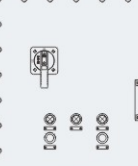
## Distribution Boxes HRMD92 Series Explosion-proof Distribution Panels

Typical scheme diagram			
Enclosure type	Components arrangement		
HRMD92-I			
HRMD92-II			
HRMD92-IIB			
HRMD92-III			
HRMD92-IIIB			
HRMD92-IV			
HRMD9-IVB			



## Distribution Boxes HRMD92 Series Explosion-proof Distribution Panels

### Typical scheme diagram

Enclosure type	Components arrangement		
HRMD92-V			
HRMD92-VB			
HRMD92-VI			
HRMD92-VIB			
HRMD92-VII			
HRMD92-VIIB			



## Distribution Boxes HRMD92 Series Explosion-proof Distribution Panels

Typical scheme diagram	
Enclosure type	Components arrangement
HRMD92-VIII	
HRMD92-VIII B	
HRMD92-IX	
HRMD92-IX B	

