

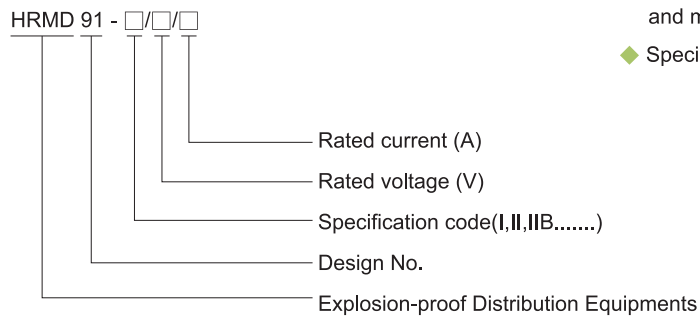
Distribution Boxes

HRMD91 Series Explosion-proof Distribution Equipments



- ◆ 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+H2), 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.)
- ◆ Copper-free aluminium enclosure, powder coated surface.
- ◆ Equipped with specialized hinge structure, which can prevent the flameproof joints from damage when opening and closing the box, 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

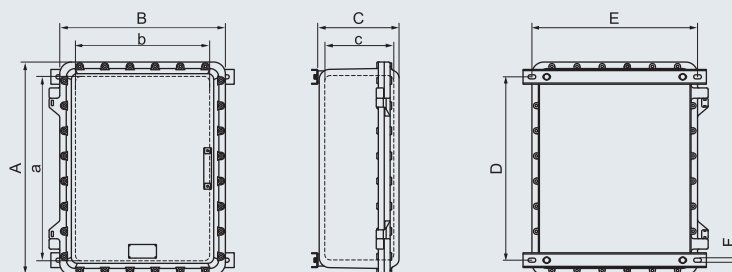
Distribution Boxes

HRMD91 Series Explosion-proof Distribution Equipments



Technical data	
Explosion-proof Distribution Equipments HRMD91-□/□/□	
Explosion protection	
Gas explosion protection	⊕ II 2 G Ex db IIB+H ₂ T□ ¹⁾ Gb
Dust explosion protection	⊕ II 2 D Ex tb IIIC T□ ¹⁾ Db IP66
	¹⁾ See Selection table, P6/24
Certificates	ATEX and IECEx (applied for)
Conformity to standards	EN 60079-0, EN 60079-1, EN 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-31
Enclosure material	Copper-free aluminium enclosure, powder coated surface, window grey (RAL7040)
Exposed fastener	Stainless steel
Built-in components	
Power circuit breaker	MCB (Miniature Circuit Breaker) or MCCB (Moulded Case Circuit Breaker)
Branch switch	MCB (Miniature Circuit Breaker) or MCCB (Moulded Case Circuit Breaker)
Terminal	International brand of terminal
Indicator	Red, green, yellow, blue
Pushbutton	Red, green, yellow
Control switch	HK series control switches
AC contactor	International famous brand
Thermal overload relay	International famous brand
PLC programmer	International famous brand
Soft starter	International famous brand
Rated voltage	Max. 1000V AC 50/60Hz
Rated current	Max. 1200A
Degree of protection	IP66
Internal&external earthing	M6/M8, M8/M8
Ambient temperature	-60℃~+60℃
Cable entries	Standard M□ x 1.5 plug (the size of entry hole should be processed in accordance with actual requirements), NPT thread can be customized.
Cable gland (optional)	DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~29.
Entry direction	Bottom
Mounting	Surface type (standard) Pedestal type (optional)

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



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Selection table of HRMD91 explosion-proof distribution equipment

Version	Max. dissipated power (W)			Max. rated current	External dimension			Internal dimension			Mounting dimension			Weight of enclosure (kg)
	T4/T130℃	T5/T95℃	T6/T80℃		A	B	C	a	b	c	D	E	F	
HRMD91-I	200	120	80	63A	250	200	170	192	142	131	180	130	10	6.70
HRMD91-II	200	120	80	63A	300	200	170	242	142	131	230	130	10	8.00
HRMD91-IIB	240	140	100	100A	350	200	170	292	142	131	280	130	10	9.50
HRMD91-III	290	170	125	160A	350	300	200	290	240	159	280	230	12	14.50
HRMD91-IIIB	350	200	130	200A	350	300	270	290	240	229	280	230	12	17.50
HRMD91-IV	420	230	140	250A	450	350	210	378	278	163	365	265	12	23.00
HRMD91-IVB	500	280	160	320A	450	350	280	378	278	233	365	265	12	27.50
HRMD91-V	520	320	190	400A	560	400	210	488	328	155	475	315	14	34.50
HRMD91-VB	620	350	200	500A	560	400	280	488	328	225	475	315	14	39.50
HRMD91-VI	660	380	220	630A	634	434	265	560	360	205	522	322	14	46.00
HRMD91-VIB	660	380	220	630A	634	434	335	560	360	275	522	322	14	52.00
HRMD91-VII	700	400	250	800A	720	560	275	640	480	215	620	460	14	74.50
HRMD91-VIIB	700	400	250	1000A	720	560	345	640	480	285	620	460	14	83.00
HRMD91-VIII	800	500	350	1000A	980	720	275	880	620	190	820	560	18	165.00
HRMD91-VIIIB	800	500	350	1000A	980	720	375	880	620	290	820	560	18	185.00
HRMD91-IX	1000	600	500	1200A	1280	900	300	1180	800	205	1120	740	18	275.00
HRMD91-IXB	1000	600	500	1200A	1280	900	450	1160	740	360	1120	730	18	315.00

Note: 1. No cable entries for standard design. Cable entries shall be drilled by user.

2. 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 P7/20~29.



HRMD91 Explosion-proof distribution equipment for terminal box use

Suitable for terminal boxes of distribution system

Note: 1. HRMD91 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.

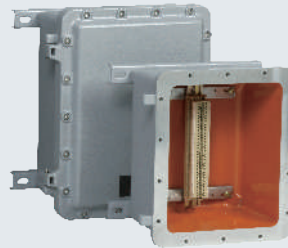
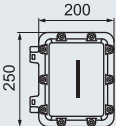


Illustration of HRMD91 Explosion-proof Distribution Equipment for terminal box use

See table for Max. number of fitted terminals

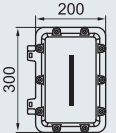
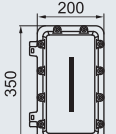
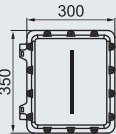
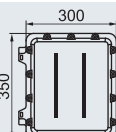
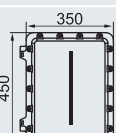
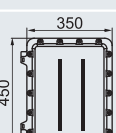
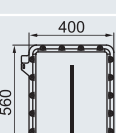
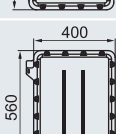
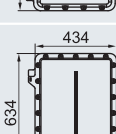
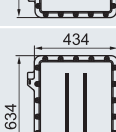
Version	Terminal arrangement	Terminal size(mm ²)									
		2.5	4	6	10	16	35	70	120	185	300
HRMD91-I		20	18	15	12	9	-	-	-	-	-

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HRMD91 Series Explosion-proof Distribution Equipments

Illustration of HRMD91 Explosion-proof Distribution Equipment for terminal box use

See table for Max. number of fitted terminals

Version	Terminal arrangement	Terminal size(mm ²)									
		2.5	4	6	10	16	35	70	120	185	300
HRMD91-II		28	25	21	18	15	5	-	-	-	-
HRMD91-IIB		36	32	28	24	20	5	-	-	-	-
HRMD91-III HRMD91-IIIB		72	64	56	24	20	10	5	-	-	-
		72	64	56	24	20	10	5	-	-	-
HRMD91-IV HRMD91-IVB		100	90	80	60	25	15	10	5	-	-
		100	90	80	60	25	15	10	5	-	-
HRMD91-V HRMD91-VB		140	130	100	80	70	24	18	5	5	5
		140	130	100	80	70	24	18	5	5	5
HRMD91-VI HRMD91-VIB		160	140	120	100	80	56	22	10	5	5
		160	140	120	100	80	56	22	10	5	5

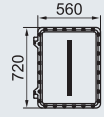
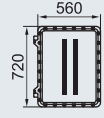
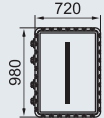
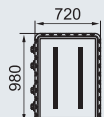
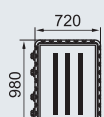
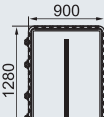
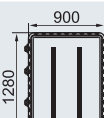
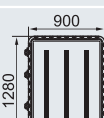


Distribution Boxes

HRMD91 Series Explosion-proof Distribution Equipments

Illustration of HRMD91 Explosion-proof Distribution Equipment for terminal box use

See table for Max. number of fitted terminals

Version	Terminal arrangement	Terminal size(mm ²)									
		2.5	4	6	10	16	35	70	120	185	300
HRMD91-VII HRMD91-VIIB		90	80	70	60	40	25	25	14	10	5
		270	240	210	165	135	64	25	12	10	5
HRMD91-VIII HRMD91-VIIIB		270	240	210	165	135	64	25	12	10	5
		264	248	200	160	136	90	72	42	-	-
		396	372	300	240	204	135	-	-	-	-
HRMD91-IX HRMD91-IXB		640	600	488	392	328	165	90	24	18	16
		360	340	272	220	184	124	100	56	40	-
		540	510	408	330	276	186	-	-	-	-

HRMD91 Explosion-proof Distribution Equipment 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 HRMD91 control boxes.

2. HRMD91 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.

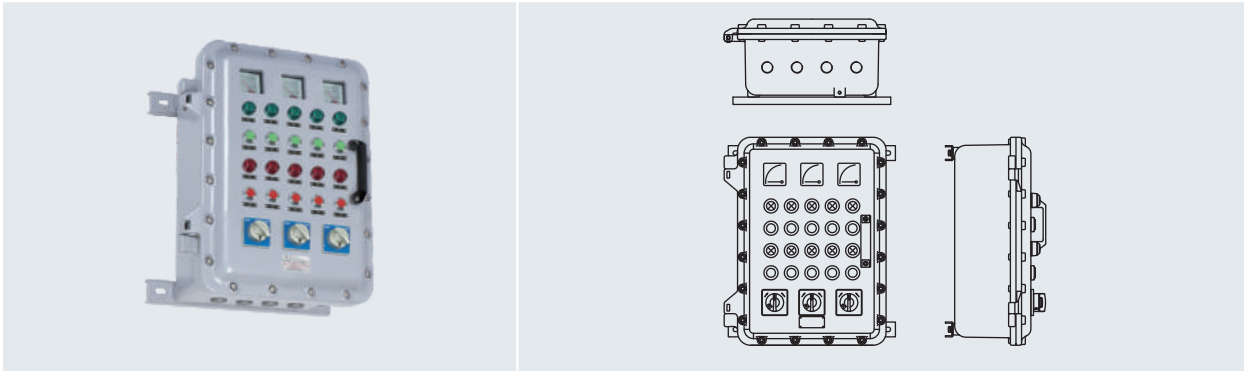
3. It can be customized in accordance with user's requirements and conforms to the usage limits of conformity certificate. The number of cover components and the Max. number of holes on side can meet the requirements of dissipated power and enclosure mechanical strength.



Distribution Boxes

HRMD91 Series Explosion-proof Distribution Equipments

Example diagram for control box use



HRMD91 Explosion-proof distribution equipment for distribution box use

Suitable for power units of distribution system

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 and BB8050 explosion-proof ammeters/voltmeters etc. in HRMD91 distribution boxes.

2. HRMD91 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. 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

