PV Product Catalogue

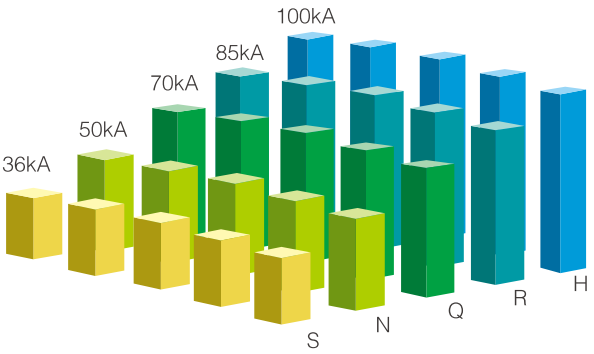
Noark

Contents

Ex9MD1	Ex9MD2	Ex9MD3	Ex9MD4	Ex9MD5
Ex9M1SD	Ex9M2SD	Ex9M3SD	Ex9M1SD	Ex9M5SD
↓	↓	↓	↓	↓
125A	250A	400A	630A	800A

Standard type - S and N

High-breaking capacity type - Q, R and H



Model	Rated current (A)																					
	16	20	25	32	40	50	63	80	100	125	160	180	200	225	250	315	350	400	500	630	700	800
Ex9MD1	■	■	■	■	■	■	■	■	■	■												
Ex9MD2										■	■	■	■	■	■							
Ex9MD3															■	■	■	■				
Ex9MD4																		■	■	■		
Ex9MD5																				■	■	■

Note:
- Ex9MD1 is adjustable for thermal protection, range: 0.8-1.0 In
- Ex9MD2 is adjustable for thermal and magnetic protection, range: 0.8-1.0 In, 5-10 In
- Ex9MD3, Ex9MD4 and Ex9MD5 are the same as Ex9MD2

Ex9MD DC Moulded Case Circuit Breaker

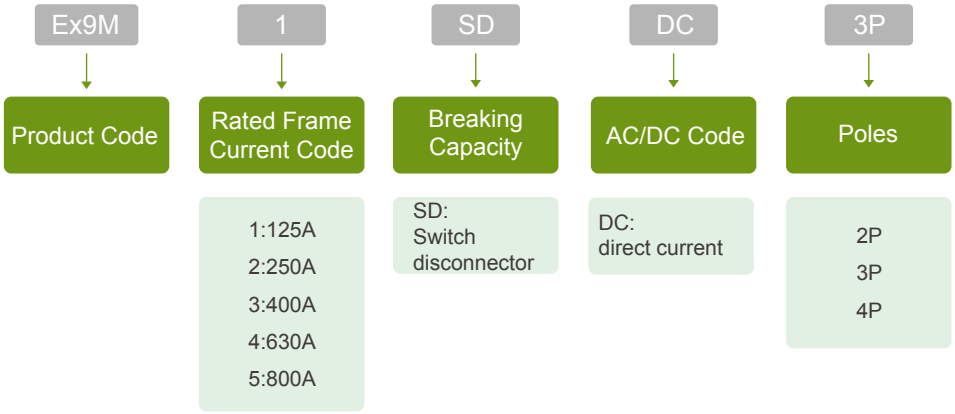
Ex9MD	1	S	TM	DC	125	3P	
Product Code	Rated Frame Current Code	Breaking Capacity Code	Tripping device code	AC/DC Code	Rated Current (A)	Poles	
Ex9MD:DC Protection	1:125A 2:250A 3:400A 4:630A 5:800A	B:25kA	TM: Thermomagnetic , for protection of general power distribution	DC: Direct current	125, 100, 80, 63, 50, 40, 32, 25, 20, 16	2P	①
		S:36kA			250, 225, 200, 180, 160, 125	3P	
		N:50kA			400,350, 315,250	4P4T: Neutral protected, on-and -off	②
		Q:70kA			630,500,400	4P4I: Neutral protected, without on-and -off	②
		R:85kA			800,700,630	4P4U: Neutral unprotected, on-and -off	②
		H:100kA				4P4N: Neutral unprotected, without on-and -off	②

Example:

“Ex9MD1 S TM DC125 3P”: means DC Moulded Case Circuit Breaker of the Ex9M series, frame current 125A, breaking capacity 36kA, 3 poles, rated current 125A with thermal-magnetic distribution protection trip unit.

Note: ①:2P only for Ex9MD1, Ex9MD2
②:Special Product – Please contact NOARK before placing an order

Ex9MSD Switch disconnector



Example:

Ex9M1SD DC 3P:means an Ex9MSD switch disconnector,frame current 125A,DC,3 poles.

Parameters

Ex9MD Series DC Circuit Breaker			Ex9MD1						Ex9MD2					
For PV system														
Number of poles			2P/3P/4P						2P/3P/4P					
Rated frame current (A)			125						250					
Electrical performance														
Rated working voltage (V)		U_e	500/750/1000						500/750/1000					
Rated current (A)		I_n	16-20-25-32-40-50-63-80-100-125						125-160-180-200-225-250					
Rated insulation voltage (V)		U_i	1000						1000					
Rated impulse withstand voltage (kV)		U_{imp}	8						8					
Type of breaking			B	S	N	Q	R	H	B	S	N	Q	R	H
Ultimate breaking capacity (kA)		I_{cu} 1000V DC	25	36	50	70	85	100	25	36	50	70	85	100
Service breaking capacity (% Icu)		I_{cs}	100%						100%					
Isolation function			■						■					
Utilization category			A						A					
Service life (C-O cycle)	Mechanical	Actual mean value	15000						15000					
		Test value	7000						7000					
	Electrical	Actual value	5000						5000					
		Standard value	1000						1000					
Protection														
Thermomagnetic		Long-time delay	(0.8-0.9-1.0)×I_n						(0.8-0.9-1.0)×I_n					
		Short-time delay	—						—					
		Instantaneous	10×I_n						(5-6-7-8-9-10)×I_n					
Control and indication														
Control mode	Manual	Direct(RHD)	□						□					
		Extended(ERH)	□						□					
	Motor mechanism(MOD)		□						□					
Shunt release(SHT)			□						□					
Under-voltage release(UVT)			□						□					
Auxiliary contact(AX)			□						□					
Alarm contact(AL)			□						□					
Connection and installation														
Degree of protection	All sides		IP40						IP40					
	Wiring terminal		IP20						IP20					
Wiring	Wiring assembly		Front/rear						Front/rear					
	Plug-in base(PIA)		□						□					
	Draw-out base(DOB)		—						—					
Shorted row(DCB)			■						■					
Key lock(KLK)			ON/OFF position						ON/OFF position					
Phase shield(PHS)			■						■					
Mechanical interlock(MIT)			□						□					
External dimensions (mm) W × H × D		a(2*/3/4)	62/90/120						70/105/140					
		b	140						157					
		c	81.6						91.5					
Weight (kg) (Fixed before connection)	2P		0.9						1.2					
	3P		1.2						1.7					
	4P		1.7						2.2					

■standard □Optional — None

* Only Ex9MD1 Ex9MD2 have 2 P; 500V for 2 poles in series connection, 750V for 3 poles in series connection, 1000V for 4 poles in series connection

	Ex9MD3						Ex9MD4						Ex9MD5					
	 						 						 					
	3P/4P						3P/4P						3P/4P					
	400						630						800					
	750/1000						750/1000						750/1000					
	250-315-350-400						400-500-630						630-700-800					
	1000						1000						1000					
	8						8						8					
	B	S	N	Q	R	H	B	S	N	Q	R	H	B	S	N	Q	R	H
	25	36	50	70	85	100	25	36	50	70	85	100	25	36	50	70	85	100
	100%						100%						100%					
	■						■						■					
	A						A						A					
	10000						10000						5000					
	4000						4000						2500					
	2000						2000						1000					
	1000						1000						500					
	(0.8-0.9-1.0)×I_n						(0.8-0.9-1.0)×I_n						(0.8-0.9-1.0)×I_n					
	—						—						—					
	(5-6-7-8-9-10)×I_n						(5-6-7-8-9-10)×I_n						(5-6-7-8-9-10)×I_n					
	□						□						□					
	□						□						□					
	□						□						□					
	□						□						□					
	□						□						□					
	□						□						□					
	□						□						□					
	IP40						IP40						IP40					
	IP20						IP20						IP20					
	Front/rear						Front/rear						Front/rear					
	□						—						—					
	□						□						□					
	■						■						■					
	ON/OFF position						ON/OFF position						ON/OFFposition					
	■						■						■					
	□						□						□					
	140/185						195/260						195/260					
	255						300						300					
	118.5						142						142					
	—						—						—					
	5.0						10.2						10.2					
	6.6						13.5						13.5					

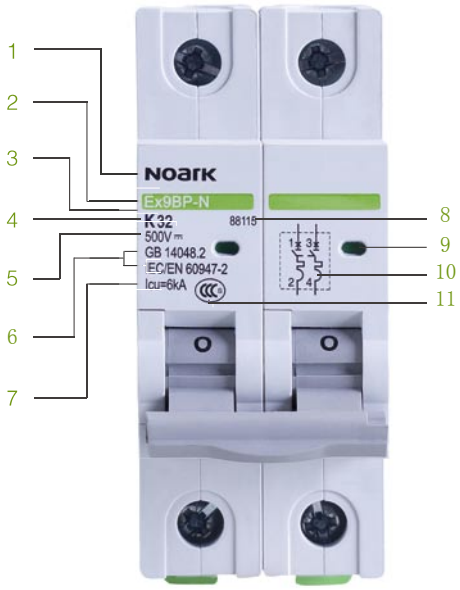
Parameters

Ex9M Series Switch Disconnector				Ex9M1SD	Ex9M2SD
Switch disconnector					
Number of poles				2P/3P/4P	2P/3P/4P
Rated frame current (A)				125	250
Electrical performance					
Working frequency(Hz)		f		50/60	50/60
Rated operational voltage (V)Ue			AC	380/400/415/660/690	380/400/415/660/690
			DC	500/750/1000	500/750/1000
Rated working current(A) In			AC	125	250
			DC	125	250
Rated insulation voltage(V)		Ui		1000	1000
Rated impulse withstand voltage		U_{imp}		8	8
Rated shorttime withstand current (A)	(A)		1s	1800	3200
			3s	1800	3200
			20s	700	1350
Isolation function				■	■
Utilization type			AC	AC22A/AC23A	AC22A/AC23A
			DC	DC22A/DC23A	DC22A/DC23A
Service life (C-O)	Mechanical		Actual mean value	15000	15000
			Test value	7000	7000
	Electrical		Actual value	5000	5000
			Standard value	1000	1000
Control and indication					
Control mode	Manual		Direct(RHD)	□	□
			Extended(ERH)	□	□
	Motor mechanism(MOD)			□	□
Shunt release(SHT)				□	□
Under-voltage release(UVT)				□	□
Auxiliary contact(AX)				□	□
Alarm contact(AL)				□	□
Connection and installation					
Degree of protection	All sides			IP40	IP40
	Wiring terminal			IP20	IP20
Wiring	Wiring assembly			Front/Rear	Front/Rear
	Plug-in base(PIA)			□	□
	Draw-out base(DOB)			—	—
Terminal shield(TCV)	Front			□	□
	Rear			—	—
Key lock(KLK)				ON/OFF position	ON/OFF position
Phase shield(PHS)				■	■
Mechanical interlock(MIT)				□	□
External dimensions (mm) W × H × D			a(2*/3/4)	62/90/120	70/105/140
			b	140	157
			c	81.6	91.5
Weight (Kg) (Fixed before connection)	2P			0.6	1.1
	3P			1.0	1.5
	4P			1.5	2.0

■ standard □Optional — None * Only Ex9M1SD, Ex9M2SD have 2 P; 500V for 2 poles in series connection, 750V for 3 poles in series connection,1000V for 4 poles in series connection

	Ex9M3SD	Ex9M4SD	Ex9M5SD
	 	 	 
	3P/4P	3P/4P	3P/4P
	400	630	800
	50/60	50/60	50/60
	380/400/415/660/690	380/400/415/660/690	380/400/415/660/690
	750/1000	750/1000	750/1000
	400	630	800
	400	630	800
	1000	1000	1000
	8	8	8
	5000	8000	10000
	5000	8000	10000
	2400	3000	3800
	■	■	■
	AC22A/AC23A	AC22A/AC23A	AC22A/AC23A
	DC22A/DC23A	DC22A/DC23A	DC22A/DC23A
	10000	5000	5000
	4000	4000	2500
	2000	2000	2000
	1000	1000	500
	□	□	□
	□	□	□
	□	□	□
	□	□	□
	□	□	□
	□	□	□
	□	□	□
	IP40	IP40	IP40
	IP20	IP20	IP20
	Front/Rear	Front/Rear	Front/Rear
	□	—	—
	□	□	□
	□	□	□
	—	—	—
	ON/OFF position	ON/OFF position	ON/OFF position
	■	■	■
	□	□	□
	140/185	195/260	195/260
	255	300	300
	118.5	142	142
	—	—	—
	4.5	9.5	9.5
	6.0	12.7	12.7

Appearance



1 Brand
2 Type
3 Rated current
4 Tripping type
5 Rated voltage
6 Conformed Standards
7 Rated breaking capacity
8 Ordering code
9 Indicator
10 Electrical diagram
11 Signal of certificate

Characteristics

Instantaneous tripping type

- Curve C
  Protection for low PV module perceptual load and photovoltaic line system
  Rated current:1~63A(30℃)
  Tripping characteristic:
  instantaneous tripping range(7-14)In

- Curve K
  Protection for high PV module perceptual load and photovoltaic line system,and have a higher impact resistant current ability
  Tripping characteristic:
  instantaneous tripping range(14-20)In

* For the detail of tripping curve,please refer to appendix

Features

The product can realize non-polarity wiring,and ensure the safety of equipment

Conformed standards

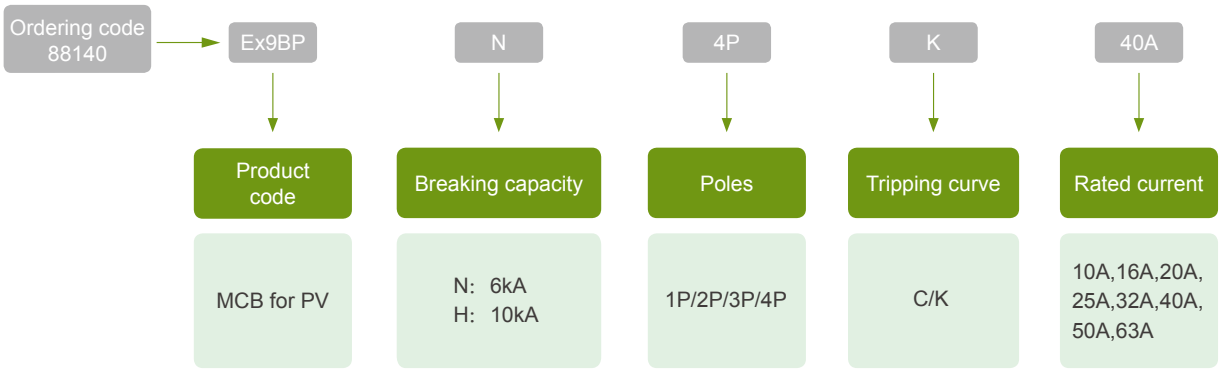
IEC / EN60898-1

Altitude

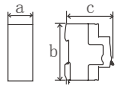
Ex9BP Series products have passed the high-altitude test and the test data are as follows.

Altitude(m)	2000	3000	4000	5000
Dielectric(V DC)	3110	2799	2550.2	2332.5
Max working voltage for 4P tandem connection (VDC)	1000	900	820	750
40℃ thermal rating(A)	$1\times I_n$	$0.96\times I_n$	$0.93\times I_n$	$0.9\times I_n$
Rated impulse withstand voltage Uimp(kV)	4	3.6	3	2.2

Selection Guide

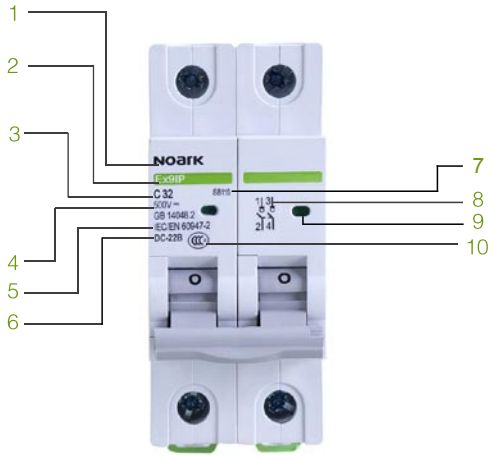


Parameters

MCB Ex9BP for PV						
For PV system only (IEC/EN 60947-2)						
Poles			1P	2P	3P	4P
Rated frame current (A)			63			
Electrical performance						
Rated working voltage	U_e	V DC	250	500	750	1000
Rated current	I_n	A	10,16,20,25,32,40,50,63			
Rated insulated voltage	U_i	V	1000			
Rated implused voltage	U_{imp}	kV	4			
Type of breaking			N/H			
Ultimate breaking capacity		kA	6/10			
Service breaking capacity	(%Icu)		100%			
Curve type			C/K			
Tripping type			Thermal magnetic type			
Service life (C-O)	Mechanica	Actual value	20000			
		Standard value	8500			
	Electrical	Actual value	10000			
		Standard value	1500			
Control and indication						
Auxiliary contact			□			
Alarm contact			□			
Shunt release			□			
Undervoltage release			□			
Overvoltage release			□			
Connection and installation						
Protection degree	All sides		IP40			
	Connection terminal		IP20			
Padlock			ON/OFF position			
Wire		mm^2	1~35			
Working temperature		℃	-30~+70			
Resistance to humidity and heat			Class 2			
Altitude above sea		m	≤2000			
Relative humidity			+20℃，≤95%；+40℃，≤50%			
Pollution degree			3			
Installation environment			Avoid obvious shock and vibration			
Installation class			Class III			
Mounting			DIN35 rail			
Dimensions(mm) (WxHxL) 	a		18	36	54	72
	b		89	89	89	89
	c		72	74	74	74
Weight		kg	0.12	0.24	0.36	0.48

■ Standard □ Optional — None

Appearance



1 Brand
2 Type
3 Rated current
4 Rated voltage
5 Conformed standard
6 Utilization category
7 Ordering code
8 Electrical diagram
9 Status indicator
10 Signal of certificates

Characteristic

Ex9IP are based on Ex9B platform. Appearance dimension is the same as Ex9B products

Function：

- Break and connect circuit on load
- Isolation

Status indication

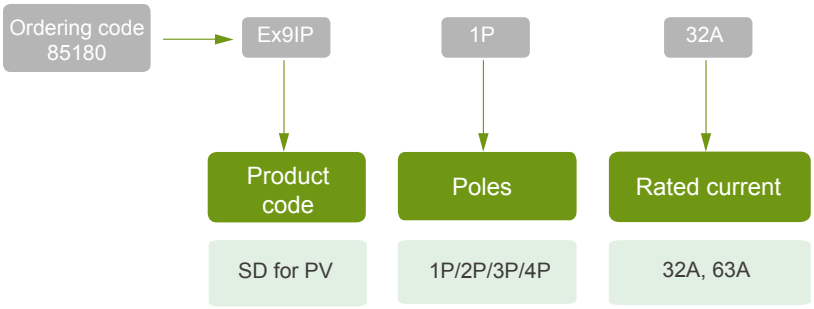
According to status of inner contact, Red/Green indication makes ON/OFF status visual.

The working voltage which topped 1000VDC can provide a more reliable protection for PV system

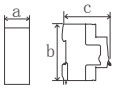
Conformed standard

IEC/EN 60947-3

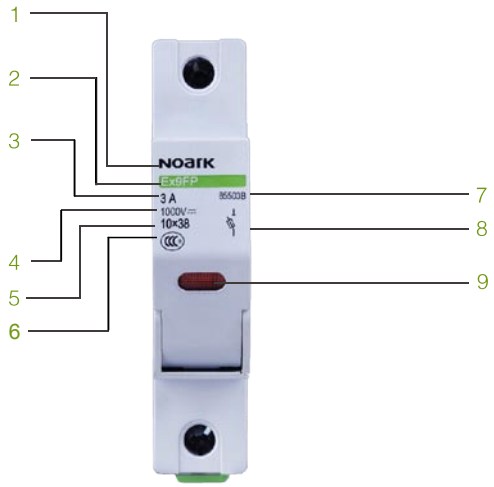
Selection Guide



Parameters

SD Ex9IP for PV							
For PV DC (IEC/EN 60947-3)							
Poles				1P	2P	3P	4P
Electrical performance							
Rated working voltage	Ue		VDC	250	500	750	1000
Rated current	In		A	32,63			
Rated insulated voltage	Ui		V	1000			
Rated short-time withstand current	Ie 1s			12			
Rated short-current making capacity	Ie 0.1s			20			
Service life (C-O)	Mechanical	Actual value		10000			
		Standard value		1700			
	Electrical	Actual value		1000			
		Standard value		300			
Connection and Installation							
Protection degree	All sides			IP40			
	Connection terminal			IP20			
Utilization category				DC-22B			
Wire			mm	1~35			
Working temperature			℃	-30~+70			
Resistance to humidity and heat				Class 2			
Altitude above sea				≤2000			
Relative humidity				+20℃，≤95%；+40℃，≤50%			
Pollution degree				3			
Installation environment				Avoid obvious shock and vibration			
Installation category				Class III			
Installation class				TH35-7.5/DIN35 rail			
Appearance dimension (mm) (WxHxL)			a	18	36	54	72
			b	89			
			c	80			
Weight			kg	0.12	0.24	0.36	0.48

Appearance



1 Brand
2 Type
3 Rated current
4 Rated voltage
5 Fuse size
6 Signal of certificates
7 Ordering code
8 Electrical diagram
9 Status indicator

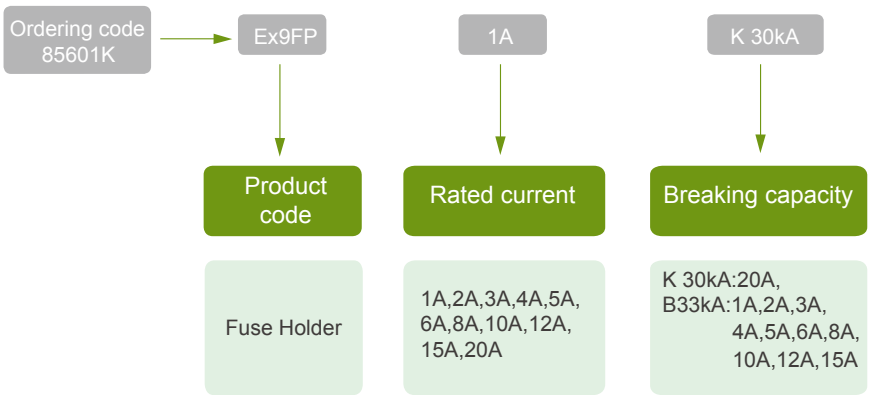
Characteristic

- The range of voltage: 1000V DC
- Maximum of breaking capacity is 33KA to provide a reliable protection
- The innovation way of fuse replacing make the operation safer
- Fault indication will be on the light constantly when a fault occur,and to remind the customer replace the fuse timely
- The size of applicable fuse: 10×38mm

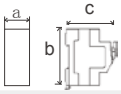
Conformed standard

IEC/EN 60269

Selection Guide



Parameter

Ex9FP Fuse Holder for PV				
For PV DC (IEC/EN 60269)				
Poles			1P/2P	
Electrical performance				
Rated working voltage	Ue	VDC	1000	
Rated current	In	A	1,2,3,4,5,6,8,10,12 ,15	20
Breaking capacity		kA	33	30
Max power dissipation		w	3	
Connection and Installation				
Protection degree			IP20	
Wire		mm	2.5~10	
Working temperature		℃	-30~+70	
Resistance to humidity and heat			Class 2	
Altitude above sea			≤2000	
Relative humidity			+20℃，≤95%； +40℃，≤50%	
Pollution degree			3	
Installation environment			Avoid obvious shock and vibration	
Installation class			Class III	
Installation category			TH35-7.5/DIN35 rail	
Appearance dimension (mm) (WxHxL)		a	18	
		b	89	
		c	80	
Fuse size		mm	10x38	
Weight		kg	0.07	

Characteristic

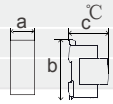
Ex9UP series surge protective device

- Products are verified by Class II test, which can withstand short-time impulse current
- Products special for PV system
- The voltage of products is up to 1000VDC
- When the deterioration of varistor occurs, the heat release unit can separate the SPD from the main circuit to avoid danger of fire
- Plug-in module design, make it convenient to change module without connection
- Remote-signal port is able to provide remote indication and alarm
- Indication unit help users to know the status of device

Selection Guide

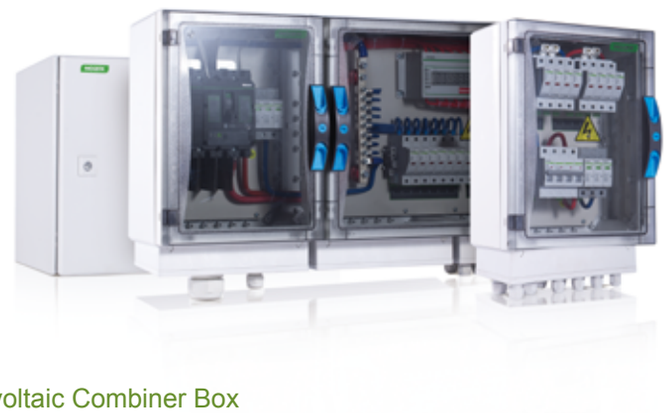
Ordering code 83114	Ex9U	P	40	R	T	3P	1000V
	SPD	Test type	Max discharge current Ima	Remote contact	Insertable module	Poles	Max continuous operational voltage Uc
		P: SPD for PV DC (note: accord with test level II)	Imax=40kA	R: with remote contact(insertable without this code) Default:without remote contact	T:Insertable module	1P: Correspond DC 500V 3P: Correspond DC 1000V (note: restable module T without this code)	500V:DC500V 1000V:DC1000V (note : restable module T is only DC500V optional)

SPD Ex9UP			Ex9UP	
For PV DC (IEC 61643-1/ EN 61643-11)				
Poles			1P	3P
Electrical performance				
Test type			II	
Open voltage	Uoc max	V DC	500	1000
Max continuous operational voltage	Uc	V DC	500	1000
Nominal discharge current	In(8/20)us	kA	20	
Maximum discharge current	Imax (8/20)us	kA	40	
Voltage protection level	Up	kV	2.0	3.8
Control and indication				
Instruction			■	
Insertable module			■	
Remote contact			□	
Remote contact	Max working voltage (V)		250V AC / 30V DC	
	Max working current(Resistive/ Inductive)		1A (250V AC)	
	Max working current (Resistive/ Inductive)		1A (30V DC)	
Connection and Installation				
Wire	Hard calbe	mm^2	4~25	
	Flexible calbe	mm^2	4~16	
Stripping length		mm	10	
Terminal screws			M5	
Torque (Nm)	Main circuit		3.5	
	Remote contact		0.25	
Protection degree		All sides	IP40	
		Connection terminal	IP20	
Installation environment			Avoid obvious shock and vibration	
Altitude above sea			≤2000	
Working temperature			-30~+70	
Relative humidity			30%~90%	
Installation category			TH35-7.5/DIN35 rail	
Appearance dimension (mm) (WxHxL)		a	18	54
		b	102	99
		c	67.6	67.6
Weight		kg	0.12	0.36



■ Standard □ Optional — None

Product Overview



PVBx Series Photovoltaic Combiner Box

PVBx series PV combiner box functions of combining circuit and surge protection between PV modules and inverters.

PVBx Z Series Smart Photovoltaic Combiner Box

PVBX Z series intelligent PV combiner box could upload and monitor the status of current, voltage, switch and SPD. Electrical data is displayed by LED and transferred by the means of RS485

Characteristics

ALL components are PV specialized by Noark, voltage of which is up to 1000VDC

Different size of combiner box and different solution to meet different demands of customers. Number of mounting units are from 1 to 20.

Protection degree of IP 65

Selection Guide

PVBx	Z	8	1
Product Code	Model of PVBx	Loop Number	PV assembly type
	Z: Smart _: Standard	1: 1 loop tank 2: 2 loop tank 3: 3 loop tank 4: 4 loop tank 6: 6 loop tank 8: 8 loop tank 10: 10 loop tank 12: 12 loop tank 14: 14 loop tank 16: 16 loop tank 18: 18 loop tank 20: 20 loop tank	1:used for solar cell in crystalline silicon 125 2:used for solar cell in crystalline silicon 156 3:used for sin film solar cell 4:used for other solar cells

Parameter

Model	Standard	Smart
Electrical performance		
Voltage range of PV array(V DC)	1000	
Max.string input in parallel	20	
Max.current of each fuse input(A)	15	
Max diameter of each input cable(mm)	6.5	
Max diameter of each output cable(mm)	17	
Protection function		
Input fuse/breaker for PV DC	■	
Output breaker for PV DC	■	
Lightning protection module for PV	■	
preventing reverse current	□	
Environmental Adaptability		
Protection degree	IP65	
Relative humidity	0~99%	
Installation temperature	-25~+70	
Anti-corrosion	corrosin of rain,hail and snow	
Temperature resistance(Box)	-40(oc)to +120(oc)	
Position-free materials	exclusive of silicon and halogen	
Flame retardant	conform to IEC 60695-2-11,UL Subject 94V-2	
Chemical resistance	Prevent 10% of acid,alkali,gasoline and heavy oil	
UV resistance	UV resistance tested for outdoor installation	
Degree of resistance to impact	Degree of resistance to impact IK08(5 Joule)	
Smart communication		
Communication interface	—	RS485
Each circuit current measurement	—	■
Voltage measurement system	—	■
Switch state upload	—	□
Surge protector state upload	—	□
Temperature measurement inside box	—	□
Alarm	—	□

■ Standard □ Optional — None

Monitoring string current and voltage, providing the Modbus RTU output, making combiner box "smart".

- Standardized products, 4~20strings, the same dimensions of all products
- Double-layer wiring, large aperture thread design
- Easy installation, simple operation
- High accuracy: ±1%RDG+2DGT
- Low-power consumption
- Relay signal output function
- With power-supply module PVP, the monitoring device SUP could be supplied by PV power instead of grid

SUP

Power-supply module

Selection of monitoring device

SUP	4S
Product code	strings number
Smart monitoring device	4S: 4 strings 5S: 5 strings 6S: 6 strings 7S: 7 strings 8S: 8 strings 9S: 9 strings 10S: 10 strings 11S: 11 strings 12S: 12 strings 13S: 13 strings 14S: 14 strings 15S: 15 strings 16S: 16 strings 17S: 17 strings 18S: 18 strings 19S: 19 strings 20S: 20 strings

Selection of power-supply module

PVPS	DC 1000V
Product code	Input Voltage
power-supply module	DC230V: Input voltage DC 230V DC400V: Input voltage DC 400V DC1000V: Input voltage DC 1000V

Electrical Specification for Monitoring device	ELECTRICAL SPECIFICATION
Power	
Input Power	24VDC, 350mA, Required (not included)
Max. Power Consumption (W)	8(Input Voltage 24VDC, 20 Channels)
Monitoring	
Max. Quantity of Channels	20
Maxi. String Current (A)	20
Range of Current Monitoring (A)	0.5~18 per channel
Accuracy of Current Monitoring	±(1%RDG+2DGT)
Range of Voltage Monitoring (V)	100~1200
Accuracy of Voltage Monitoring	±(1%RDG+3DGT)
Output	
Alarm	Over Voltage200V~1200V(Adjustable)
	Under Voltage50V~800V(Adjustable)
	Over load protection1.0A~18.0A(Adjustable), default13.6A
	Reverse Current-18.0A~-1.0A(Adjustable)
Status Monitoring	SPD
	Fuse
	Breaker
Communication	
Protocols	ModBus-RTU
Baud rate	4800bps/9600bps/19200bps(Adjustable), default value 9600bps
Addressing	1~247
Communication Distance 1200	1200m(shielded twisted-pair cable)
Environment	
Operation Temperature (℃)	-25~+70
Humidity (%)	0~95
Storage Temperature (℃)	0~+85
Altitude (m)	≤2500
Pollution Degree	2
Physical	
Size	10.25”×3.2”×2.8” (260mm×80mm×70mm)
Weight (kg)	0.575(Full Function, 20 Channels)

Electrical Specification for Power-supply module		ELECTRICAL SPECIFICATION			NOTES
Maximum ratings		Min.	Typ.	Max.	
Input Voltage (Vdc)		-0.3		1200	
Operating Temperature (℃)		-25		70	
Storage Temperature (℃)		-40		85	
Output Current (mA)				350	
Input Characteristics					
Operating Input Voltage (Vdc)		100		1000	
Maximum Input Current (mA)				120	Vout=24V, Full load
Output Characteristics					
Output Voltage Set Point (%Vset)		-3		+3	With a 1.0% trim resistor
Output Voltage Regulation (%Vset)	Over Line	-1		+1	Vin=100~1000Vdc
	Over Load	-2		+2	Io=Min to Full Load
	Over Temperature	-2		+2	Ta=-25℃ to 70℃
	Total output range	-2		+2	Over load, line, temperature regulation
Output Voltage Ripple and Noise(mV) (5Hz~20MHz bandwidth)	Peak-to-Peak			500	Full Load
	RMS			100	Full Load
Output Voltage Over-shoot at Start-up (%Vset)				5	Vin=400V, Turn on
Output Voltage Under-shoot at Power-Off (mV)				100	Vin=400V, Turn OFF
Efficiency (%)			75		Vin=400V, Vout=24V, Full load
Physical					
Size (mm)		4.72"×1.8"×3.23" (120×46×82)			
Weight (kg)			0.24		