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Sandwich communication extensions XN06 Part number 88972250



Specifications

- Standard Modbus RS485 or TCP/IP protocol
- Connects one or several Millenium 3 to a touch screen, a supervision PC or a network gateway
- Exchange of the input/output state and/or of internal values
- Updating date and time of a group of Millenium 3
- Power supply via the controller

rait numbers					
	Type	Description	Supply		
88972250	XN06	Modbus RS-485 (slave) communication extension	Via the 24 V DC controller		

Certifications	CE, UL, CSA, GL
Conformity to standards (with the low voltage directive and EMC directive)	IEC/EN 61131-2 (Open equipment) IEC/EN 61131-2 (Zone B) IEC/EN 61000-6-2, IEC/EN 61000-6-3 (*) IEC/EN 61000-6-3 (*) IEC/EN 61000-6-4 (*) Except configuration (88 970 1.1 or 88 970 1.2) + (88 970 250 or 88 970 270) + 88 970 241 class A (class B in a metal enclosure)
Earthing	None
Protection rating	In accordance with IEC/EN 60529 : IP40 on front panel IP20 on terminal block
Overvoltage category	3 in accordance with IEC/EN 60664-1
Pollution	Degree : 2 in accordance with IEC/EN 61131-2
Max operating Altitude	Operation : 2000 m Transport : 3,048 m
Mechanical resistance	Immunity to vibrations IEC/EN 60068-2-6, Fc test Immunity to shock IEC/EN 60068-2-27, Fa test
Resistance to electrostatic discharge	Immunity to ESD IEC/EN 61000-4-2, level 3
Resistance to HF interference	Immunity to radiated electrostatic fields IEC/EN 61000-4-3, Immunity to fast transients (burst immunity) IEC/EN 61000-4-4, level 3 Immunity to shock waves IEC/EN 61000-4-5 Radio frequency in common mode IEC/EN 61000-4-6, level 3 Voltage dips and breaks (AC) IEC/EN 61000-4-11 Immunity to damped oscillatory waves IEC/EN 61000-4-12
Conducted and radiated emissions	Class B (*) in accordance with EN 55022, EN 55011 (CISPR22, CISPR11) group 1 (*) Except configuration (88 970 1.1 or 88 970 1.2) + (88 970 250 or 88 970 270) + 88 970 241 class A (class B in metallic cabinet)
Operating temperature	-20 ->+55 °C (+40 °C in a non-ventilated enclosure) in accordance with IEC/EN 60068-2-1 and IEC/EN 60068-2-2
Storage temperature	-40+70 °C in accordance with IEC/EN 60068-2-1 and IEC/EN 60068-2-2
Relative humidity	95 % max. (no condensation or dripping water) in accordance with IEC/EN 60068-2-30
Mounting	On symmetrical DIN profile, 35×7.5 mm and 35 mm \times 15 or panel (2 \times 4 mm Ø)
Screw terminals connection capacity	Flexible wire with ferrule = 1 conductor: 0.25 to 2.5 mm ² (AWG 24AWG 14) 2 conductors 0.25 to 0.75 mm ² (AWG 24AWG 18) Semi-rigid wire = 1 conductor: 0.2 to 2.5 mm ² (AWG 25AWG 14) Rigid wire = 1 conductor: 0.2 to 2.5 mm ² (AWG 25AWG 14) 2 conductors 0.2 to 1.5 mm ² (AWG 25AWG 16) Tightening torque = 0.5 N.m (4.5 lb-in) (tighten using screwdriver diam. 3.5 mm)

Characteristics of communication extensions

onal action of communication extensions				
General characteristics				
Certifications	UL, CSA	UL, CSA		
Earthing	Yes, refer to the quick reference guide supplied with the product	Yes, refer to the quick reference guide supplied with the product		
Operating temperature	-20 \rightarrow +55 $^{\circ}\text{C}$ (+40 $^{\circ}\text{C}$ in a non-ventilated enclosure) in accordance with IEC/EN 60068-2-1 and IEC/EN 60068-2-2	$0 \to +55$ °C (+40 °C in a non-ventilated enclosure) in accordance with IEC/EN 60068-2-1 and IEC/EN 60068-2-2		
Cable length	Maximum length of the network : 1000 m (9600 Baud maxi, AWG26)	Maximum length between 2 controllers : 100 m		

02/11/2015 www.crouzet.com

00070050	unication parameters				
72250 88970270					
Type of link	2 or 4-wire ; RTU or ASCII			-	
- 21	1200, 2400, 4800, 9600, 19200, 28800, 38400, 57600			-	
Transmission rate (Bauds)					
Parity	None ; even ; odd			-	
Addressing	essing 1 →247			Static or dynamic (BootP server)	
Characteristics of exchanges					
88972250	88970270				
Ladder programming					
Ladder programming					
Image of smart relay I/O	4		-		
Status	1		-		
Function blocks programming					
Read-words	8			8	
Read/Write	8			8	
Clock words	12		1		
"Status" words	1			1	
Processing characteristics of CB, CD, XD & XB product					
types					
LCD display	CD, XD: Display with 4 lines of 18 characters				
Programming method	Function blocks / SCF (Grafcet) or Ladder				
Program size	For CB, CD:				
1 Togram size	4 Ko : 64 macros max.				
	256 blocks max. per macro 180 typical blocks				
	For XB, XD:				
	8 Ko : 64 macro max.				
	256 blocks max. per macro				
	350 typical blocks				
	Or for CB, CD, XB, XD : 120 lines in Ladder				
Program memory	Flash EEPROM				
Removable memory	EEPROM				
Data memory	368 bit/200 words				
Back-up time in the event of power failure	Program and settings in the controller : 10 years				
	Program and settings in the plug-in memory : 10 years				
	Data memory : 10 years				
Cycle time	Function blocks : 6 →90 ms (typically 20 ms)				
Cycle time	Ladder: typically 20 ms				
D					
	Input acquisition time: 1 to 2 cycle times				
Response time					
Clock data retention	10 years (lithium battery) at 25 °C				
·	10 years (lithium battery) at 25 °C Drift < 12 min/year (at 25 °C)				
Clock data retention		t)			
Clock data retention Clock drift	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift	t)			
Clock data retention Clock drift Timer block accuracy	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % \pm 2 cycle times	t)			
Clock data retention Clock drift Timer block accuracy Start up time on power up	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % \pm 2 cycle times < 1,2 s	t)			
Clock data retention Clock drift Timer block accuracy	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % \pm 2 cycle times < 1,2 s	t)			
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % \pm 2 cycle times < 1,2 s	t) 100 →24	10 V AC		
Clock data retention Clock drift Timer block accuracy Start up time on power up	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC	100 →24			
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704)	100 →24 (889703	3)		
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC	100 →24 (889703 100 →24	3) 40 V AC		
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 %	100 →24 (889703 100 →24 -15 % / +	3) 40 V AC -10 %		
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC→28.8 VAC	100 →24 (889703 100 →24 -15 % / +	3) 40 V AC		
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC→28.8 VAC 50/60 Hz (+4 % / -6 %)	100 →24 (889703 100 →24 -15 % / + or 85 VA	3) 40 V AC -10 % .C→264 VAC	or 47 →53 Hz/57 < 63 Hz	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47→53 Hz/57 < 63 Hz	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz	3) 40 V AC -10 % C→264 VAC : (+4 % / -6 %) c	or 47 →53 Hz/57 < 63 Hz	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC→28.8 VAC 50/60 Hz (+4 % / -6 %)	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz	3) 40 V AC -10 % .C→264 VAC		
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47→53 Hz/57 < 63 Hz	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD	3) 10 V AC 10 % C→264 VAC 1: (+4 % / -6 %) of 1: (+2 % / -6 %) of time 1: (+2 % / -6 %) of time 1: (+2 % / -6 %) of time	s)	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47—53 Hz/57 < 63 Hz 10 ms (repetition 20 times)	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD	3) 40 V AC -10 % C→264 VAC : (+4 % / -6 %) o	s)	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47—53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD	3) 10 V AC 10 % C→264 VAC 1: (+4 % / -6 %) of 1: (+2 % / -6 %) of time 1: (+2 % / -6 %) of time 1: (+2 % / -6 %) of time	s) :7 VA	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47→53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA	100 →24 (88970€ 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB	3) 10 V AC 10 % C→264 VAC 1: (+4 % / -6 %) of 12-XD10-XB10 120 : 11 VA	s) :7 VA	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC-28.8 VAC 50/60 Hz (+4 % / -6 %) or 47→53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA	100 →24 (889706 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB	3) 10 V AC -10 % C→264 VAC : (+4 % / -6 %) of expetition 20 times 012-XD10-XB10 120 : 11 VA 1310 with extens	s) : 7 VA on : 12 VA	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47→53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 : 7.5 VA	100 →24 (889706 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB	3) 10 V AC 10 % C→264 VAC 1 (+4 % / -6 %) of 2012-XD10-XB10 202 : 11 VA 310 with extens 326 : 12 VA 326 with extens	s) : 7 VA on : 12 VA	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47—53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20: 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 with extension : 10 VA 1780 V AC	100 →24 (88970	3) 10 V AC 10 % C→264 VAC (+4 % / -6 %) G 12-XD10-XB10 120 : 11 VA 110 with extens 126 : 12 VA 136 with extens 136 with extens 136 with extens	s) : 7 VA on : 12 VA on : 17 VA	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47→53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC	100 →24 (88970	3) 10 V AC 10 % C—264 VAC 1 (+4 % / -6 %) of the control of th	s) : 7 VA on : 12 VA on : 17 VA	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47→53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704)	100 →24 (88970	3) 10 V AC -10 % C → 264 VAC 1 (+4 % / -6 %) of expetition 20 times of 2-XD10-XB10 of 20 11 VA of 20	s) : 7 VA on : 12 VA on : 17 VA	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs Input voltage	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47—53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (-15 % / +20 %)	100 →24 (88970	3) 10 V AC -10 % C → 264 VAC 1 (+4 % / -6 %) of expetition 20 times of 2-XD10-XB10 of 20 11 VA of 20	s) : 7 VA on : 12 VA on : 17 VA	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47—53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (-15 % / +20 %) 4,4 mA @ 20,4 V AC	100 →24 (88970	3) 10 V AC 10 % C→264 VAC 1 (+4 % / -6 %) of the experiment of the	s) : 7 VA on : 12 VA on : 17 VA AC AC (-15 % / +10 %)	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs Input voltage	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47—53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (-15 % / +20 %)	100 →24 (88970	3) 10 V AC -10 % C->264 VAC 1 (+4 % / -6 %) of expetition 20 times of 2-XD10-XB10 of 20 times of 2-XD10-XB10 with extens of 20 times of 2	s) : 7 VA on : 12 VA on : 17 VA CC AC (-15 % / +10 %) V AC	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs Input voltage	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47—53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (-15 % / +20 %) 4,4 mA @ 20,4 V AC	100 →24 (88970	3) 10 V AC 10 % C→264 VAC 1 (+4 % / -6 %) of the experiment of the	s) : 7 VA on : 12 VA on : 17 VA CC AC (-15 % / +10 %) V AC	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs Input voltage	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47→53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (-15 % / +20 %) 4,4 mA @ 20,4 V AC 5,2 mA @ 24,0 V AC	100 →24 (88970	3) 10 V AC -10 % C->264 VAC 1 (+4 % / -6 %) of expetition 20 times of 2-XD10-XB10 of 20 times of 2-XD10-XB10 with extens of 20 times of 2	s) : 7 VA on : 12 VA on : 17 VA CC AC (-15 % / +10 %) V AC	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs Input voltage Input current Input impedance	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47—53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20: 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 : 7.5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (-15 % / +20 %) 4,4 mA @ 20,4 V AC 5,2 mA @ 24,0 V AC 6,3 mA @ 28,8 V AC 4.6 kΩ	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB XD26-XB	3) 10 V AC 10 % C→264 VAC 1 (+4 % / -6 %) of the control of	s) : 7 VA on : 12 VA on : 17 VA CC AC (-15 % / +10 %) V AC	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs Input voltage Input current Input impedance Logic 1 voltage threshold	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47→53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20: 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 : 7.5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (889704) 24 V AC (5,2 mA @ 24,0 V AC 5,2 mA @ 24,0 V AC 6,3 mA @ 28,8 V AC 4.6 kΩ ≥ 14 V AC	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB XD26-XB	3) 10 V AC 10 % C→264 VAC 1 (+4 % / -6 %) of the experition 20 times of the experition 20 times of the experiment	s) : 7 VA on : 12 VA on : 17 VA CC AC (-15 % / +10 %) V AC	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs Input voltage Input current Input impedance Logic 1 voltage threshold Making current at logic state 1	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47→53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (889704) 24 V AC (5,2 mA @ 24,0 V AC 5,2 mA @ 28,8 V AC 4.6 kΩ ≥ 14 V AC >2 mA	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB XD26-XB	3) 10 V AC -10 % C→264 VAC : (+4 % / -6 %) α epetition 20 time 012-XD10-XB10 020 : 11 VA 110 with extens 326 : 12 VA 326 with extens 30 100 →240 V A (889703) 100 →240 V A 0,24 mA @ 85 0,75 mA @ 26 350 kΩ ≥ 79 V AC >0.17 mA	s) : 7 VA on : 12 VA on : 17 VA AC 4 V AC	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs Input voltage Input current Input impedance Logic 1 voltage threshold Making current at logic state 1 Logic 0 voltage threshold	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47→53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (-15 % / +20 %) 4,4 mA @ 20,4 V AC 5,2 mA @ 24,0 V AC 6,3 mA @ 28,8 V AC 4.6 kΩ ≥ 14 V AC >2 mA ≤ 5 V AC	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB XD26-XB	3) 10 V AC -10 % C→264 VAC : (+4 % / -6 %) α expetition 20 time 012-XD10-XB10 020 : 11 VA 110 with extens 326 : 12 VA 326 with extens AC 100 →240 V A (889703) 100 →240 V A 0,24 mA @ 85 0,75 mA @ 26 350 kΩ ≥ 79 V AC >0.17 mA ≤ 20 V AC (≤ 2	s) : 7 VA on : 12 VA on : 17 VA CC AC (-15 % / +10 %) V AC	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Input supply Input current Input impedance Logic 1 voltage threshold Making current at logic state 1 Logic 0 voltage threshold Release current at logic state 0	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47→53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 : 7.5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (-15 % / +20 %) 4,4 mA @ 20,4 V AC 5,2 mA @ 24,0 V AC 6,3 mA @ 28,8 V AC 4.6 kΩ ≥ 14 V AC >2 mA ≤ 5 V AC <<0.5 mA	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB XD26-XB	3) 10 V AC 10 % C→264 VAC 1 (+4 % / -6 %) of expetition 20 times of the control of the cont	s) : 7 VA on : 12 VA on : 17 VA AC 4 V AC	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Input supply Input voltage Input current Input impedance Logic 1 voltage threshold Making current at logic state 1 Logic 0 voltage threshold	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47—53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (-15 % / +20 %) 4,4 mA @ 20,4 V AC 5,2 mA @ 24,0 V AC 6,3 mA @ 28,8 V AC 4.6 kΩ ≥ 14 V AC > 2 mA ≤ 5 V AC < 0.5 mA 50 ms	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB XD26-XB	3) 10 V AC 10 % C→264 VAC 1 (+4 % / -6 %) α 2 (+4 % / -6 %) α 3 (+4 % / -6 %) α 4 (+4 % / -6 %) α 3 (+4 % / -6 %) α 4 (+4 % / -6 %) α	s) : 7 VA on: 12 VA on: 17 VA CC CC (-15 % / +10 %) V AC 4 V AC 88 V AC: XE10, XR06, XR10, XR14)	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Input surrent Input voltage Input current Input impedance Logic 1 voltage threshold Making current at logic state 1 Logic 0 voltage threshold Release current at logic state 0	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47→53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 : 7.5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (-15 % / +20 %) 4,4 mA @ 20,4 V AC 5,2 mA @ 24,0 V AC 6,3 mA @ 28,8 V AC 4.6 kΩ ≥ 14 V AC >2 mA ≤ 5 V AC <<0.5 mA	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB XD26-XB	3) 10 V AC 10 % C→264 VAC 1 (+4 % / -6 %) of expetition 20 times of the control of the cont	s) : 7 VA on: 12 VA on: 17 VA CC CC (-15 % / +10 %) V AC 4 V AC 88 V AC: XE10, XR06, XR10, XR14)	
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Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs Input voltage Input current Input impedance Logic 1 voltage threshold Making current at logic state 1 Logic 0 voltage threshold Release current at logic state 0 Response time with LADDER programming	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47→53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 : 7.5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (-15 % / +20 %) 4,4 mA @ 20,4 V AC 5,2 mA @ 24,0 V AC 6,3 mA @ 28,8 V AC 4.6 kΩ ≥ 14 V AC >2 mA ≤ 5 V AC <0.5 mA 50 ms State 0 →1 (50/60 Hz) Configurable in increments of 10 ms	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB XD26-XB	3) 10 V AC 10 % C→264 VAC 1 (+4 % / -6 %) α 20 : 11 VA 310 with extens 326 : 12 VA 326 with extens 330 κΩ 100 →240 V A 0,24 mA @ 85 0,75 mA @ 26 350 κΩ ≥ 79 V AC >0.17 mA ≤ 20 V AC (≤ 2 <0.5 mA 50 ms State 0 < 1 (50 Configurable i	s) : 7 VA on : 12 VA on : 12 VA on : 17 VA AC AC (-15 % / +10 %) V AC 4 V AC 48 V AC : XE10, XR06, XR10, XR14) 160 Hz) n increments of 10 ms	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs Input voltage Input current Input impedance Logic 1 voltage threshold Making current at logic state 1 Logic 0 voltage threshold Release current at logic state 0 Response time with LADDER programming	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47→53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 : 7.5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (889704) 24 V AC (5.2 mA @ 24,0 V AC 5.2 mA @ 24,0 V AC 4.6 kΩ ≥ 14 V AC >2 mA ≤ 5 V AC <0.5 mA 50 ms State 0 →1 (50/60 Hz) Configurable in increments of 10 ms 50 ms min. up to 255 ms	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB XD26-XB	3) 10 V AC -10 % C→264 VAC -10 % c (+4 % / -6 %) α epetition 20 time 012-XD10-XB10 020 : 11 VA 110 with extens 326 : 12 VA 326 with extens 30 100 →240 V A (889703) 100 →240 V A 0,24 mA @ 85 0,75 mA @ 26 350 kΩ ≥ 79 V AC >0.17 mA ≤ 20 V AC (≤ 2 <0.5 mA 50 ms State 0 < 1 (50 Configurable i 50 ms min. up	s) : 7 VA on: 12 VA on: 17 VA CC CC (-15 % / +10 %) V AC 4 V AC 28 V AC: XE10, XR06, XR10, XR14) n increments of 10 ms to 255 ms	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs Input voltage Input current Input impedance Logic 1 voltage threshold Making current at logic state 1 Logic 0 voltage threshold Release current at logic state 0 Response time with LADDER programming Response time with function blocks programming	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % \pm 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB XD26-XB 1780 V A	3) 10 V AC 10 % C→264 VAC 1 (+4 % / -6 %) α 10 epetition 20 time 10 20 : 11 VA 110 with extens 12 CA 100 →240 V A (889703) 100 →240 V A (889703) 100 →240 V A (889703) 2 79 V AC >0.17 mA ≤ 20 V AC (≤ 2 <0.5 mA 50 ms State 0 < 1 (50 Configurable i 50 ms min. up State 0 →1 (5	s) : 7 VA on: 12 VA on: 17 VA CC CC (-15 % / +10 %) V AC 4 V AC 28 V AC: XE10, XR06, XR10, XR14) 29 (60 Hz) n increments of 10 ms to 255 ms 0/60 Hz)	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs Input voltage Input current Input impedance Logic 1 voltage threshold Making current at logic state 1 Logic 0 voltage threshold Release current at logic state 0 Response time with LADDER programming	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47→53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 : 7.5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (-15 % / +20 %) 4,4 mA @ 20,4 V AC 5,2 mA @ 24,0 V AC 6,3 mA @ 28.8 V AC 4.6 kΩ ≥ 14 V AC >2 mA ≤ 5 V AC <0.5 mA 50 ms State 0 →1 (50/60 Hz) Configurable in increments of 10 ms 50 ms min. up to 255 ms State 0 →1 (50/60 Hz) In accordance with cycle time (Tc) and input response tim	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB XD26-XB 1780 V A	3) 10 V AC 10 % C→264 VAC 1 (+4 % / -6 %) of epetition 20 times in 20 tim	s) : 7 VA on: 12 VA on: 12 VA on: 17 VA CC CC (-15 % / +10 %) V AC 4 V AC 8 V AC: XE10, XR06, XR10, XR14) 0/60 Hz) in increments of 10 ms to 255 ms 0/60 Hz) with cycle time (Tc) and input response time (Tr):	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs Input voltage Input current Input impedance Logic 1 voltage threshold Making current at logic state 1 Logic 0 voltage threshold Release current at logic state 0 Response time with LADDER programming Response time with function blocks programming Maximum counting frequency	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47 →53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 : 7.5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (-15 % / +20 %) 4.4 mA @ 20.4 V AC 5.2 mA @ 24,0 V AC 6.3 mA @ 28.8 V AC 4.6 kΩ ≥ 14 V AC <>2 mA ≤ 5 V AC <<0.5 mA 50 ms State 0 →1 (50/60 Hz) Configurable in increments of 10 ms 50 ms min. up to 255 ms State 0 →1 (50/60 Hz) In accordance with cycle time (Tc) and input response tin 1/ ((2 x Tc) + Tr)	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB XD26-XB 1780 V A	3) 10 V AC 10 % C→264 VAC 1 (+4 % / -6 %) α 2 (+4 % / -6 %) α 3 (+4 % / -6 %) α 4 (889703) 100 →240 V A 3 (889703) 100 →240 V A 3 (889703) 3 (9.24 mA @ 85 0,75 mA @ 26 3 50 kΩ ≥ 79 V AC >0.17 mA ≤ 20 V AC (≤ 2 < 0.5 mA 50 ms State 0 < 1 (5 (Configurable i 50 ms min. up State 0 →1 (5 (In accordance 1/ ((2 x Tc) + 1)) α 10 (1 x + 1) α 11 x + 1 x	s) : 7 VA on: 12 VA on: 12 VA on: 17 VA CC CC (-15 % / +10 %) V AC 4 V AC 88 V AC: XE10, XR06, XR10, XR14) 0/60 Hz) n increments of 10 ms to 255 ms 0/60 Hz) with cycle time (Tc) and input response time (Tr): Tr)	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs Input voltage Input current Input impedance Logic 1 voltage threshold Making current at logic state 1 Logic 0 voltage threshold Release current at logic state 0 Response time with LADDER programming Response time with function blocks programming Maximum counting frequency Sensor type	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % \pm 2 cycle times < 1,2 s ied 24 V AC	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB XD26-XB 1780 V A	3) 10 V AC 10 V A	s) : 7 VA on: 12 VA on: 12 VA on: 17 VA CC CC (-15 % / +10 %) V AC 4 V AC 88 V AC: XE10, XR06, XR10, XR14) 0/60 Hz) n increments of 10 ms to 255 ms 0/60 Hz) with cycle time (Tc) and input response time (Tr): Tr)	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs Input voltage Input current Input impedance Logic 1 voltage threshold Making current at logic state 1 Logic 0 voltage threshold Release current at logic state 0 Response time with LADDER programming Response time with function blocks programming Maximum counting frequency	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % ± 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47 →53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 : 7.5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (-15 % / +20 %) 4.4 mA @ 20.4 V AC 5.2 mA @ 24,0 V AC 6.3 mA @ 28.8 V AC 4.6 kΩ ≥ 14 V AC <>2 mA ≤ 5 V AC <<0.5 mA 50 ms State 0 →1 (50/60 Hz) Configurable in increments of 10 ms 50 ms min. up to 255 ms State 0 →1 (50/60 Hz) In accordance with cycle time (Tc) and input response tin 1/ ((2 x Tc) + Tr)	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB XD26-XB 1780 V A	3) 10 V AC 10 % C→264 VAC 1 (+4 % / -6 %) α 2 (+4 % / -6 %) α 3 (+4 % / -6 %) α 4 (889703) 100 →240 V A 3 (889703) 100 →240 V A 3 (889703) 3 (9.24 mA @ 85 0,75 mA @ 26 3 50 kΩ ≥ 79 V AC >0.17 mA ≤ 20 V AC (≤ 2 < 0.5 mA 50 ms State 0 < 1 (5 (Configurable i 50 ms min. up State 0 →1 (5 (In accordance 1/ ((2 x Tc) + 1)) α 10 (1 x + 1) α 11 x + 1 x	s) : 7 VA on: 12 VA on: 12 VA on: 17 VA CC CC (-15 % / +10 %) V AC 4 V AC 88 V AC: XE10, XR06, XR10, XR14) 0/60 Hz) n increments of 10 ms to 255 ms 0/60 Hz) with cycle time (Tc) and input response time (Tr): Tr)	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs Input voltage Input current Input impedance Logic 1 voltage threshold Making current at logic state 1 Logic 0 voltage threshold Release current at logic state 0 Response time with LADDER programming Response time with function blocks programming Maximum counting frequency Sensor type	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % \pm 2 cycle times < 1,2 s ied 24 V AC	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB XD26-XB 1780 V A	3) 10 V AC 10 V A	s) : 7 VA on: 12 VA on: 12 VA on: 17 VA CC CC (-15 % / +10 %) V AC 4 V AC 88 V AC : XE10, XR06, XR10, XR14) 0/60 Hz) n increments of 10 ms to 255 ms 0/60 Hz) with cycle time (Tc) and input response time (Tr): Tr)	
Clock data retention Clock drift Timer block accuracy Start up time on power up Characteristics of products with AC power suppl Supply Nominal voltage Operating limits Supply frequency range Immunity from micro power cuts Max. absorbed power Isolation voltage Inputs Input voltage Input current Input impedance Logic 1 voltage threshold Making current at logic state 1 Logic 0 voltage threshold Release current at logic state 0 Response time with LADDER programming Response time with function blocks programming Maximum counting frequency Sensor type Input type	Drift < 12 min/year (at 25 °C) 6 s/month (at 25 °C with user-definable correction of drift 1 % \pm 2 cycle times < 1,2 s ied 24 V AC (889704) 24 V AC -15 % / +20 % or 20.4 VAC—28.8 VAC 50/60 Hz (+4 % / -6 %) or 47—53 Hz/57 < 63 Hz 10 ms (repetition 20 times) CB12-CD12-XD10-XB10 : 4 VA CB20-CD20 : 6 VA XD10-XB10 with extension : 7,5 VA XD26-XB26 with extension : 10 VA 1780 V AC 24 V AC (889704) 24 V AC (889704) 24 V AC (889704) 24 V AC (5,2 mA @ 24,0 V AC 5,2 mA @ 24,0 V AC 6,3 mA @ 28.8 V AC 4.6 k Ω \geq 14 V AC < 0.5 mA 50 ms State 0 \rightarrow 1 (50/60 Hz) Configurable in increments of 10 ms 50 ms min. up to 255 ms State 0 \rightarrow 1 (50/60 Hz) In accordance with cycle time (Tc) and input response tin 1/ ((2 x Tc) + Tr) Contact or 3-wire PNP Resistive	100 →24 (889703 100 →24 -15 % / + or 85 VA 50/60 Hz 10 ms (re CB12-CD CB20-CD XD10-XB XD26-XB XD26-XB 1780 V A	3) 10 V AC 10 V AC 10 V AC 10 W C \rightarrow 264 VAC 1 (+4 % / -6 %) of expetition 20 times 2	s) : 7 VA on: 12 VA on: 12 VA on: 17 VA CC CC (-15 % / +10 %) V AC 4 V AC 88 V AC : XE10, XR06, XR10, XR14) 0/60 Hz) n increments of 10 ms to 255 ms 0/60 Hz) with cycle time (Tc) and input response time (Tr): Tr)	

2/11/2015					www.crouzet.
Status indicator	On LCD screen for CD and XD		On LCD scr	een for CD and XD	
Characteristics of relay outputs common to the					
Max. breaking voltage	5 →30 V DC 24 →250 V AC				
Breaking current	24 → 250 V AC CB-CD-XB10-XD10-XR06-XR10 : 8 A				
	XD26-XB26 : 8 x 8 A relays, 2 x 5 A relays				
	XE10: 4 x 5 A relays				
Floatrical durability for E00 000 apprecting avaloa	XR14: 4 x 8 A relays, 2 x 5 A relays				
Electrical durability for 500 000 operating cycles	Usage category DC-12 : 24 V, 1.5 A Usage category DC-13 : 24 V (L/R = 10 ms), 0.6 A				
	Usage category AC-12 : 230 V, 1.5 A				
	Usage category AC-15 : 230 V, 0.9 A				
Max. Output Common Current	12A for O8,O9,OA				
Minimum switching capacity	10 mA (at minimum voltage of 12 V)				
Minimum load	12 V, 10 mA				
Maximum rate		Off load: 10 Hz			
Mechanical life	At operating current : 0.1 Hz				
/oltage for withstanding shocks		10,000,000 operations (cycles) In accordance with IEC/EN 60947-1 and IEC/EN 60664-1 : 4 kV			
Off-cycle response time	Make 10 ms	721 7 00001 1 1 1 KV			
	Release 5 ms				
Built-in protections	Against short-circuits : None				
	Against overvoltages and overloads : None				
Status indicator	On LCD screen for CD and XD				
characteristics of product with DC power sup	plied				
Supply	12 V DC	24 V DC			
	(889705 & 8970814 & 88970840)	(889701 et 88970	.2)		
lominal voltage	12 V DC	24 V DC			
Operating limits	-13 % / +20 %	-20 % / +25 %			
	or 10.4 V DC < 14.4 V DC (including ripple)	or 19.2 V DC < 30 V	, ,	ripple)	
mmunity from micro power cuts	≤ 1 ms (repetition 20 times)	≤ 1 ms (repetition 20	,		
Max. absorbed power	CB12 with solid state outputs: 1.5 W	XD10-XB10 with rela			vith solid state outputs : 3 W
	CD12: 1.5 W	XD26-XB26 with sol			
	CD20: 2.5 W	CB20-CD20 with rel	•		
	XD26-XB26 : 3 W XD26-XB26 with extension : 5 W	XD26 with relay out			
	XD26 with solid state outputs : 2.5 W	XD10-XB10 with ext			
	·	XD26-XB26 with ext	tension : 10 W		
Protection against polarity inversions	Yes	Yes			
Digital inputs (I1 to IA and IH to IY)	12 V DC		24 V DC	-d 00070 O\	
nout voltago	(889705 & 88970814 & 88970840) 12 V DC (-13 % / +20 %)		(889701 and 889702)		
nput voltage nput current	3,9 mA @ 10,44 V DC		24 V DC (-20 % / +25 %) 2.6 mA @ 19.2 V DC		
nput current	4,4 mA @ 12,0 V DC		,	3,2 mA @ 24 V DC	
	5,3 mA @ 14,4 VDC			4,0 mA @ 30,0 VDC	
nput impedance	2.7 kΩ		7.4 kΩ		
ogic 1 voltage threshold	≥7 V DC		≥ 15 V DC		
Making current at logic state 1	≥2 mA		≥2.2 mA		
ogic 0 voltage threshold	≤ 3 V DC		≤5 V DC		
Release current at logic state 0	<0.9 mA		<0.75 mA		
esponse time	1 →2 cycle times + 6 ms		1 →2 cycle times + 6 ms		
Maximum counting frequency	I1 & I2 : FBD (Up to 6 k Hz) & Ladder (1 k Hz			O (Up to 6 k Hz) & Ladde	,
	I3 to IA & IH to IY: in accordance with cycle response time (Tr): 1/((2 x Tc) + Tr)	time (1c) and input			vith cycle time (Tc) and inpu
Sensor type			response time (Tr) : 1/ ((2 x Tc) + Tr) Contact or 3-wire PNP		
Conforming to IEC/EN 61131-2		Contact or 3-wire PNP		Type 1	
nput type	Resistive	Type 1		Resistive	
solation between power supply and inputs	None		None		
solation between inputs	None		None		
rotection against polarity inversions	Yes		Yes		
Status indicator	On LCD screen for CD and XD		On LCD screen for CD and XD		
Analogue or digital inputs (IB to IG)	12 V DC			24 V DC	
	(889705 & 88970814 & 88970840)			(889701 and 88970	2)
CB12-CD12-XD10-XB10	4 inputs IB →IE			4 inputs IB →IE	
B20-CD20-XB26-XD26	6 inputs IB →IG			6 inputs IB →IG	
puts used as analogue inputsonly in FBD					
leasurement range	$(0 \rightarrow 10 \text{ V}) \text{ or } (0 \rightarrow \text{V power supply})$		(0 →10 V)	or $(0 \rightarrow V \text{ power supply})$)
put impedance	14 kΩ		12 kΩ		
put voltage	14.4 V DC max		30 V DC max		
alue of LSB	14 mV		29 mV		
put type	Common mode		Common mode		
desolution	10 bit at maximum input voltage		10 bit at maximum input voltage		
Conversion time	Controller cycle time		Controller cycle time		
Accuracy at 25 °C	± 5 %		±5%		
Accouracy at 55 °C	± 6.2 %		± 6.2 %		
Repeat accuracy at 55 °C	± 2 %		± 2 %		
solation between analogue channel and power supp		not inalated	None 10 m maximum, with shielded cable (sensor not isolated)		
Cable length	10 m maximum, with shielded cable (sensor Yes	not isolated)	10 m maxin Yes	ium, with shielded cable	(sensor not isolated)
	TES		162		
Protection against polarity inversions Potentiometer control	2.2 kΩ/0.5 W (recommended)		22 k0/0 F 1	V (recommended)	

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Inputs used as digital inputs			
Input voltage	12 V DC (-13 % / +20 %)	24 V DC (-20 % / +25 %)	
Input current	0,7 mA @ 10,44 VDC	1,6 mA @ 19,2 VDC	
	0,9 mA @ 12,0 VDC	2,0 mA @ 24,0 V DC	
	1,0 mA @ 14,4VDC	2,5 mA @ 30,0 VDC	
Input impedance	14 kΩ	12 kΩ	
Logic 1 voltage threshold	≥7 V DC	≥ 15 VDC	
Making current at logic state 1	≥0.5 mA	≥1.2 mA	
Logic 0 voltage threshold	≤3 V DC	≤5 V DC	
Release current at logic state 0	≤0.2 mA	≤0.5 mA	
Response time	1 →2 cycle times	1 →2 cycle times	
Maximum counting frequency in FBD	In accordance with cycle time (Tc) and input response time (Tr):	In accordance with cycle time (Tc) and input response time (Tr):	
	1/ ((2 x Tc) + Tr)	1/ ((2 x Tc) + Tr)	
Sensor type	Contact or 3-wire PNP	Contact or 3-wire PNP	
Conforming to IEC/EN 61131-2	Type 1	Type 1	
Input type	Resistive	Resistive	
Isolation between power supply and inputs	None	None	
Isolation between inputs	None	None	
Protection against polarity inversions	Yes	Yes	
Status indicator	On LCD screen for CD and XD	On LCD screen for CD and XD	
	On EOD Sciectifion OD and AD	On Edd Sciecti for de and Ab	
Characteristics of relay outputs common to the entire range			
Max. breaking voltage	5 →30 V DC 24 →250 V AC		
Max. Output Common Current	12A (10A UL) for O8,O9,OA		
Breaking current	CB-CD-XD10-XB10-XR06-XR10 : 8 A		
Broaming outforte	XD26-XB26 : 8 x 8 A relays, 2 x 5 A relays		
	XE10: 4 x 5 A relays		
	XR14:4 x 8 A relays, 2 x 5 A relays		
Electrical durability for 500 000 operating cycles	Usage category DC-12: 24 V, 1.5 A		
Electrical darability for 500 000 operating cycles	Usage category DC-13 : 24 V (L/R = 10 ms), 0.6 A		
	Usage category AC-12 : 230 V, 1.5 A		
	Usage category AC-15 : 230 V, 0.9 A		
Minimum switching capacity	10 mA (at minimum voltage of 12 V)		
Minimum load	· · · · · · · · · · · · · · · · · · ·		
	12 V, 10 mA		
Maximum rate	Off load: 10 Hz		
	At operating current : 0.1 Hz		
Mechanical life	10,000,000 operations (cycles)		
Voltage for withstanding shocks	In accordance with IEC/EN 60947-1 and IEC/EN 60664-1 : 4 kV		
Off-cycle response time	Make 10 ms		
	Release 5 ms		
Built-in protections	Against short-circuits : None		
	Against overvoltages and overloads : None		
Status indicator	On LCD screen for CD and XD		
Digital / PWM solid state output	12 V DC	24 V DC	
Digital / 1 11111 Solid State Sulpat	(88970814 & 88970840)	(889702)	
PWM solid state output*	CB12 : O4	CD12-XD10-XB10 : O4	
1 WW Solid State output	XD26 : O4 →O7	CD20-XD26-XB26 : O4 →O7	
* Only available with "FBD" programming language	* Only available with "FBD" programming language	ODEO ADEO ADEO . OF FOI	
, , , , , ,	, , , , , , , , , , , , , , , , , , , ,	40.0 00.1/00	
Breaking voltage	10.4 →30 VDC	19.2 →30 VDC	
Nominal voltage	12-24 V DC	24 V DC	
Nominal current	0.5 A	0.5 A	
Max. breaking current	0,625 A	0,625 A	
Voltage drop	≤ 2 V for I = 0.5 A (at state 1)	≤ 2 V for I = 0.5 A (at state 1)	
Response time	Make ≤ 1 ms	Make ≤ 1 ms	
	Release ≤ 1 ms	Release ≤ 1 ms	
Operating frequency	1 Maximum on inductive load	1 Maximum on inductive load	
Built-in protections	Against overloads and short-circuits : Yes	Against overloads and short-circuits : Yes	
	Against overloads and short-circuits . Tes	Against overloads and short-circuits : Yes Against overloads and short-circuits : Yes	
	Against overvoltages () . res Against inversions of power supply : Yes	Against overvoitages () . Tes Against inversions of power supply : Yes	
	(*) In the absence of a volt-free contact between the output of the	(*) In the absence of a volt-free contact between the output of the	
	logic controller and the load	logic controller and the load	
Min. load	1 mA	1 mA	
Maximum incandescent load	0.2 A / 12 V DC		
Waximum incancescent load	0,1 A / 24 V DC	0,1 A / 24 V DC	
Calvania inclation		No	
Galvanic isolation	No	No	
PWM frequency	14.11 Hz	14.11 Hz	
	56.45 Hz	56.45 Hz	
	112.90 Hz	112.90 Hz	
	225.80 Hz	225.80 Hz	
	451.59 Hz	451.59 Hz	
	1806.37 Hz	1806.37 Hz	
PWM cyclic ratio	0 →100 % (256 steps for CD, XD and 1024 for XA)	$0 \rightarrow 100 \%$ (256 steps for CD, XD and 1024 for XA)	
PWM accuracy at 120 Hz	< 5 % (20 % →80 %) load at 10 mA	< 5 % (20 % →80 %) load at 10 mA	
Max. Breaking current PWM	50 mA	50 mA	
Max. cable length PWM	20 m	20 m	
PWM accuracy at 500 Hz	< 10 % (20 % →80 %) load at 10 mA	< 10 % (20 % →80 %) load at 10 mA	
Status indicator	On LCD screen for CD and XD	On LCD screen for CD and XD	
Children in direction	The second of the Alleran	THE TENT OF THE TE	

Dimensions (mm)

XN05 - XN06

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