## EV3201

## Controllers for refrigerated cabinets, undercounters and islands, with energy-saving strategies



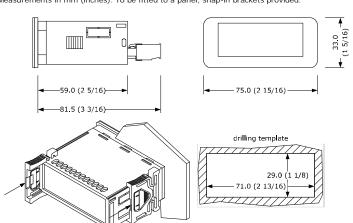




- Controllers for normal temperature units.
- Power supply 230 VAC or 12-24 VAC/DC (according to the model)
- Cabinet probe (PTC/NTC).
- Door switch/multi-purpose input.
- Compressor relay 16 A res. @ 250 VAC.
- Cooling or heating operation.

### 1 MEASUREMENTS AND INSTALLATION

Measurements in mm (inches). To be fitted to a panel, snap-in brackets provided.

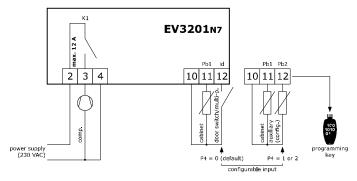


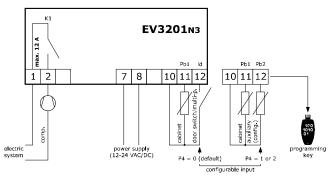
#### INSTALLATION PRECAUTIONS

- The thickness of the panel must be between 0.8 and 2.0 mm (1/32 and 1/16 in) Ensure that the working conditions are within the limits stated in the TECHNICAL SPECIFICATIONS section.
- Do not install the device close to heat sources, equipment with a strong magnetic field, in places subject to direct sunlight, rain, damp, excessive dust, mechanical vibrations
- In compliance with safety regulations, the device must be installed properly to ensure adequate protection from contact with electrical parts. All protective parts must be fixed in such a way as to need the aid of a tool to remove them.



Use cables of an adequate section for the current running through them. To reduce any electromagnetic interference connect the power cables as far away as possible from the signal cables.





# PRECAUTIONS FOR ELECTRICAL CONNECTION

- If using an electrical or pneumatic screwdriver, adjust the tightening torque.
- If the device has been moved from a cold to a warm place, the humidity may have caused condensation to form inside. Wait about an hour before switching on the
- Make sure that the supply voltage, electrical frequency and power are within the set limits. See the section  $\it TECHNICAL\ SPECIFICATIONS$ .
- Disconnect the power supply before doing any type of maintenance.
- Do not use the device as safety device
- For repairs and for further information, contact the EVCO sales network.

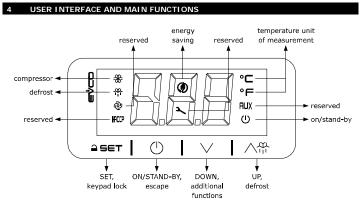
## Install following the instructions given in the section MEASUREMENTS AND INSTALLA TION.

- Power up the device as shown in the section ELECTRICAL CONNECTION and an internal test will be run. The test normally takes a few seconds, when it is finished the display will switch off.
- Configure the device as shown in the section  $Setting\ configuration\ parameters.$

	Recomi	nended configuration parameters for his	t-time use.
PAR.	DEF.	PARAMETER	MIN MAX.
SP	0.0	setpoint	r1 r2
P0	1	probe type	0 = PTC 1 = NTC
P2	0	temperature unit of measurement	0 = °C 1 = °F

Then check that the remaining settings are appropriate; see the section CONFIGURA-

- Disconnect the device from the mains.
- Make the electrical connection as shown in the section ELECTRICAL CONNECTION without powering up the device.
- Power up the device.



#### Switching the device on/off

If POF = 1 (default), touch the ON/STAND-BY key for 4 s.

If the device is switched on, the display will show the P5 value ("cabinet temperature" default);

LED	ON	OFF	FLASHING
*	compressor on	compressor off	<ul><li>compressor protection active</li><li>setpoint setting active</li></ul>
*	defrost active	-	dripping active
<b>②</b>	energy saving active     low consumption active		-
°C/°F	view temperature	-	-
(1)	device off	device on	device on/off active

If 30 s have elapsed without the keys being pressed, the display will show the "Loc" label and the keypad will lock automatically.

### 4.2 Unlock keypad

Touch a key for 1 s: the display will show the label "UnL".

#### 4.3 Set the setpoint

Check that the keypad is not locked.

		Touch the SET key.
2.	<b>₹</b>	Touch the UP or DOWN key within 15 s to set the value within the limits r1 and r2 (default "-40 50")
3.	≙SET	Touch the SET key (or do not operate for 15 s).

## Activate manual defrost (if r5 = 0, default)

Check that the keypad is not locked.

Touch the UP key for 2 s.

If P4 = 1, defrost is activated provided that the evaporator temperature is lower than the d2 threshold.

5	ADDIT	IONAL FUNC	CTIONS
5.1		•	ure detected by the probes
Check	that the	keypad is no	t locked.
1.		∨ I	Touch the DOWN key for 4 s.
2.	f		Touch the UP or DOWN key within 15 s to select a label.
	LAB. DESCRIPTI		ON
	Pb1 cabinet tem		perature
	Pb2	auxiliary ter	mperature (if P4 = 1 or 2)
3.	1 2	5€T	Touch the SET key.
4.		<b>D</b>	Touch the ON/STAND-BY key (or do not operate for $60\ s$ ) to exit the procedure.
6	SETTIN	NGS	

	6	SETTINGS	
		Setting configurat	ion parameters
	1.	≙ SET	Touch the SET key for 4 s: the display will show the label "PA".
	2.	≙ SET	Touch the SET key.
	3.	<b>₹</b>	Touch the UP or DOWN key within 15 s to set the PAS value (default "-19").
	4.	_ ≙SET	Touch the SET key (or do not operate for 15 s): the display will show the label "SP".
	5.	<b>₹</b>	Touch the UP or DOWN key to select a parameter.
	6.	<u></u> ≘SET	Touch the SET key.
	7.	<b>√</b>	Touch the UP or DOWN key within 15 s to set the value.
	8.	≙SET	Touch the SET key (or do not operate for 15 s).
	9.	aset	Touch the SET key for 4 s (or do not operate for 60 s) to exit the procedure.
1			

## Restore the factory settings (default) and store customized settings as default

Check that the factory settings are appropriate; see the section  ${\it CONFIGURATION}$ PARAMETERS.the storing of customized settings overwrites the default.

1.	aset		Touch the SET key for 4 s: the display will show the label "PA".
2.	aset		Touch the SET key.
3.	ŕ		Touch the UP or DOWN key within 15 s to set the value.
	VAL.	DESCRIPTION	ON
	149	value to res	store the factory settings (default)
	161	value to sto	re customized settings as default
4.	1 25	<b>∋∈</b> Τ	Touch the SET key (or do not operate for 15 s): the display will show the label "dEF" (when value "149" is set) or the label "MAP" (when value "161" is set).
5.	= 9	<b>∋∈</b> Τ	Touch the SET key.
6.			Touch the UP or DOWN key within 15 s to set "4".
7.	7. A SET		Touch the SET key (or do not operate for 15 s): the display will show for 4 s "" flashing, then the device will exit the procedure.
8.	Interru	upt the power	r supply to the device.
9.	1 = 9	<b>5</b> €T	Touch the SET key 2 s before action 6. to exit the procedure beforehand.

7				PARAMETERS	
	N. 1	PAR. SP	DEF.	SETPOINT setpoint	MIN MAX. r1 r2
	N.	PAR.	DEF.	ANALOGUE INPUTS	MIN MAX.
	3	CA1 CA2	0.0	cabinet probe offset auxiliary probe offset	-25 25 °C/°F -25 25 °C/°F
	4 5	P0 P1	1	probe type enable °C decimal point	0 = PTC 1 = NTC 0 = no 1 = yes
	6	P2	0	temperature unit of measure-	$0 = {^{\circ}C} \qquad 1 = {^{\circ}F}$
Q.	7	P4	0	ment configurable input function	0 = door switch/multi-pur-
•					pose input  1 = evaporator probe
					2 = condenser probe
	8	P5	0	value displayed	0 = cabinet temperature 1 = setpoint
	9	P8	5	dianlay refrach time	2 = auxiliary temperature 0 250 s : 10
	N.	PAR.	DEF.	display refresh time REGULATION	MIN MAX.
	10 11	r0 r1	2.0 -40	setpoint differential minimum setpoint	1 15 °C/°F -99 °C/°F r2
43	12	r2	50.0	maximum setpoint	r1 99 °C/°F
4	13 14	r4 r5	0.0	setpoint offset in energy saving cooling or heating operation	0 99 °C/°F 0 = cooling
	15	r12	1	position of the r0 differential	1 = heating 0 = asymmetric
					1 = symmetric
	N. 16	PAR.	DEF.	COMPRESSOR compressor on delay after pow-	MIN MAX. 0 240 min
	17			er-on	0. 240
	17 18	C2 C3	0	compressor off minimum time compressor on minimum time	0 240 min 0 240 s
<b>(</b>	19	C4	0	compressor off time during cabi- net probe alarm	0 240 min
	20	C5	10	compressor on time during cabi-	0 240 min
	21	C6	80.0	net probe alarm threshold for high condensation	0 199 °C/°F
	22	C7	90.0	warning threshold for high condensation	differential = 2 °C/4 °F 0 199 °C/°F
				alarm	
	23 N.	C8 PAR.	1 DEF.	high condensation alarm delay  DEFROST (if r5 = 0)	0 15 min MIN MAX.
	24	d0	8	automatic defrost interval	0 99 h
					0 = only manual if d8 = 3, maximum interval
	25 26	d2 d3	2.0 30	threshold for defrost end defrost duration	-99 99 °C/°F 0 99 min
					se P3 = 1, maximum duration
	27 28	d4 d5	0	enable defrost at power-on defrost dealy after power-on	0 = no 1 = yes 0 99 min
	29	d6	1	value displayed during defrost	0 = cabinet temperature
					1 = display locked 2 = dEF label
	30 31	d7 d8	0	dripping time defrost interval counting mode	0 15 min 0 = device on hours
				<b>,</b>	1 = compressor on hours
۵					2 = hours evaporator tem- perature < d9
•	32	d9	0.0	evaporation threshold for auto-	3 = adaptive -99 99 °C/°F
				matic defrost interval counting	
	33	d11 d18	40	enable defrost timeout alarm adaptive defrost interval	0 = no 1 = yes 0 999 min
					if compressor on + evapora- tor temperature < d22
	-05	14.0			0 = only manual
	35	d19	3.0	threshold for adaptive defrost (relative to optimal evaporation	0 40 °C/°F optimal evaporation tempera-
	36	d20	180	temperature) compressor on consecutive time	ture - d19 0 999 min
				for defrost	0 = disabled
	37	d22	2.0	evaporation threshold for adap- tive defrost interval counting	0 19 °C/°F optimal evaporation tempera-
				(relative to optimal evaporation temperature)	ture + d22
	N.	PAR.	DEF.	ALARMS	MIN MAX.
	38	A1	10.0	threshold for low temperature alarm (relative to setpoint)	0 99 °C/°F SP - A1
	39	A4	10.0	threshold for high temperature	0 = disabled 0 99 °C/°F
_	34	A4	10.0	alarm (relative to setpoint)	SP + A4
8	40	A6	12	high temperature alarm delay af-	0 = disabled 0 99 min x 10
				ter power-on	
	41	A7	15	high/low temperature alarms de- lay	0 199 min
	42	A11	2.0	high/low temperature alarms reset differential	1 15 °C/°F
	N.	PAR.	DEF.	DIGITAL INPUTS	MIN MAX.
	43	iO	1	door switch/multi-purpose input function	0 = none 1 = compressor off
					2 = energy saving 3 = iA alarm
					4 = iA alarm (pressure
	44	i1	0	door switch/multi-purpose input	switch)  0 = with contact closed
	45	i2	30	activation open door alarm delay	1 = with contact open -1 120 min
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-1 = disabled
<b>3</b>					if i0 = 3, multi-purpose inpural alarm delay
		L			if i0 = 4, compressor on de- lay after alarm reset
	46	i3	15	regulation inhibition maximum	-1 120 min
	47	i10	0	time with door open door closed consecutive time for	-1 = until the closing 0 999 min
				energy saving	after regulation temperature < SP
	40	110	100	number of door openings for d	0 = disabled
	48	i13	180	number of door openings for de- frost	0 240 0 = disabled
	49	i14	32	door open consecutive time for defrost	0 240 min 0 = disabled
	N.	PAR.	DEF.	ENERGY SAVING (if r5 = 0)	MIN MAX.
<b>№</b> .	50	HE2	0	energy saving maximum duration	0 999 min -1 = until the door opening
	51	HE3	0	consecutive time without operat- ing on keys for low consumption	0 240 min
<b>~</b>	N.	PAR.	DEF.	SAFETIES	MIN MAX.
$ \bigcirc $	52 53	POF PAS	-19	enable ON/STAND-BY key password	0 = no 1 = yes -99 999
•					

В	ALARMS		
COD.	DESCRIPTION	RESET	REMEDIES
Pr1	cabinet probe alarm	automatic	- check P0
r2	auxiliary probe alarm	automatic	- check probe integrity
			- check electrical connection
AL.	low temperature alarm	automatic	check A1
λН	high temperature alarm	automatic	check A4
d	open door alarm	automatic	check i0 e i1
ЮН	high condensation warning	automatic	check C6
Sd	high condensation alarm	manual	- switch the device off and on
			- check C7
A	multi-purpose input alarm	automatic	check i0 and i1
lFd	defrost timeout alarm	manual	- touch a key
			- check d2, d3 and d11
	•	•	•

iA	multi-p	urpose input alar	111	automat	IC	check iC	and m	
dFd	defrost	timeout alarm	manual		- touch a key			
			- che		- check	k d2, d3 and d11		
	•		-		·			
9	TECHNI	CAL SPECIFICA	NOITA	IS				
Purpos	se of the	control device			Functi	on contro	oller	
Constr	uction o	f the control devi	се		Built-ii	n electroi	nic device	
Contai	ner				Black, self-extinguishing			
Catego	ory of he	at and fire resista	ance		D		-	
	rements							
		59.0 mm (2 15/	16 x 1	1 5/16 x	75.0 x	33.0 x	81.5 mm (2 15/16	x 1 5/16 x
		fixed screw tern					ith removable scre	
					blocks			
Mount	ina meth	ods for the contr	ol dev	rice			a panel, snap-in br	ackets nro-
Would	ing men	lous for the conti	or acv	100	vided	nitica to	a parier, snap in bi	ackets pro
Degree	a of pro	tection provided	by th	e cover-	IP65 (	front)		
ing	e or pro	lection provided	Бу пт	e cover-	11-05 (	11 (1111)		
	ction me	thod						
		erminal blocks fo	e selec	o un to	Domos	rable cor	ew terminal blocks f	for wires up
2,5 mr		HITHING DIOCKS IC	n wire	s up to				or wires up
				-4!		111111 , 103	/ request	
		nitted length for (	conne	ction cabi			10 (22 0 ft)	
		10 m (32.8 ft)					s: 10 m (32.8 ft)	
		10 m (32.8 ft)					: 10 m (32.8 ft)	oF) 6 0
Operat	ting tem	perature					C (from 32 to 131	
a.							32 a 122 °F) in EV3	
	e tempe						°C (from -13 to 15	
Operat	ting hum	idity					dity without conde	nsate from
					10 to	90%		
		of the control de	evice		2			
Confor	-							
RoHS 2011/65/CE WEEE 2012/19					/E11		REACH (EC)	D =1 = 41 =
					/EU		` ′	Regulation
		, GL	WLLL	2012/17	/EU		1907/2006	Regulation
	014/30/		WELL	2012/17		014/35/L	1907/2006	Regulation
EMC 2	014/30/ supply		VVLLL	2012/17		014/35/L	1907/2006	Regulation
EMC 2	supply				LVD 2		1907/2006 JE	Regulation
Power	supply AC (+10°	JE % -15%), 50/60	Hz (±	3 Hz), ma	LVD 20	\ insulate	1907/2006 JE	
EMC 20 Power 230 V/ 12-24	supply AC (+10°	UE % -15%), 50/60 (+10% -15%),	Hz (±	3 Hz), ma	LVD 20	\ insulate	1907/2006 JE ed in EV3 N7	
EMC 20 Power 230 VA 12-24 SELV 0	supply AC (+10° VAC/DC class 2 se	UE % -15%), 50/60 (+10% -15%),	Hz (±	3 Hz), ma Hz (±3 ł	LVD 20	\ insulate	1907/2006 JE ed in EV3 N7	
Power 230 VA 12-24 SELV C	supply AC (+10° VAC/DC class 2 so ng metho	JE % -15%), 50/60 (+10% -15%), purce	Hz (± 50/60 ol devi	3 Hz), ma Hz (±3 ł	LVD 20 ax. 2 VA dz), ma	\ insulate	1907/2006 JE ed in EV3 N7	
Power 230 V/ 12-24 SELV of Earthin	supply AC (+10° VAC/DC class 2 so ng metho	W -15%), 50/60 (+10% -15%), burce ods for the control withstand voltag	Hz (± 50/60 ol devi	3 Hz), ma Hz (±3 ł	LVD 20 ax. 2 VA dz), ma None 4 KV	\ insulate	1907/2006 JE ed in EV3 N7 2W in EV3 N3, pro	
Power 230 V/2 12-24 SELV CEarthir Rated Over-v	supply AC (+10° VAC/DC class 2 so ng metho impulse- /oltage c	W -15%), 50/60 (+10% -15%), burce ods for the control withstand voltag	Hz (± 50/60 ol devi	3 Hz), ma Hz (±3 ł	LVD 20 ax. 2 VA dz), ma None 4 KV	insulate x. 4 VA/2	1907/2006 JE ed in EV3 N7 2W in EV3 N3, pro	
Power 230 VA 12-24 SELV C Earthir Rated Over-V Softwa	supply AC (+10° VAC/DC class 2 so ng metho impulse- /oltage c	JE  % -15%), 50/60 (+10% -15%), ource ods for the control withstand voltage ategory and structure	Hz (± 50/60 ol devi	3 Hz), ma Hz (±3 ł	LVD 20 Ax. 2 V#Az), ma None 4 KV III; II	insulate x. 4 VA/2	1907/2006 JE ed in EV3 N7 2W in EV3 N3, pro	povided by a
Power 230 W 12-24 SELV C Earthir Rated Over-V Softwa	supply AC (+10° VAC/DC class 2 so ng metho impulse- voltage co are class gue input	JE  % -15%), 50/60 (+10% -15%), ource ods for the control withstand voltage ategory and structure s	Hz (± 50/60 ol devi	3 Hz), ma Hz (±3 ł	LVD 20 Ax. 2 VA Iz), ma  None 4 KV III; II A 1 for F	insulate x. 4 VA/2 in EV3	1907/2006  JE  ad in EV3 N7  2W in EV3 N3, pro  N3	ovided by a
Power 230 VA 12-24 SELV C Earthir Rated Over-V Softwa	supply AC (+10° VAC/DC class 2 so ng metho impulse- voltage co are class gue input	JE  % -15%), 50/60 (+10% -15%), ource ods for the control withstand voltage ategory and structure	Hz (± 50/60 bl devi	3 Hz), ma Hz (±3 ł	None 4 KV III; II A 1 for F	in EV3  PTC or NT	1907/2006  JE  ad in EV3 N7  2W in EV3 N3, pro  N3  TC probes (cabinet p 90 Ω @ 25 °C, 77 °F	ovided by a
Power 230 W 12-24 SELV C Earthir Rated Over-V Softwa	supply AC (+10° VAC/DC class 2 so ng metho impulse- voltage co are class gue input	UE  % -15%), 50/60 (+10% -15%), source odds for the control withstand voltag ategory and structure s Sensor type	Hz (± 50/60 bl devi	3 Hz), ma Hz (±3 ł	LVD 20 AX. 2 VF AZ), ma  None 4 KV III; II A 1 for F KTY 8	in EV3  PTC or NT	1907/2006  JE  ad in EV3 N7  2W in EV3 N3, pro  N3	ovided by a
EMC 2 Power 230 W 12-24 SELV C Earthin Rated Over-V Softwa Analog	supply AC (+10° VAC/DC class 2 sing methor impulse- voltage class gue input	UE  % -15%), 50/60 (+10% -15%), purce ods for the control withstand voltage ategory and structure s Sensor type Measurement firesolution	Hz (± 50/60 bl devi	3 Hz), ma Hz (±3 ł	None 4 KV III; II A 1 for F KTY 8	in EV3  PTC or NT 1-121 (9° 50 to 15° (1°F)	1907/2006  JE  ad in EV3 N7  2W in EV3 N3, pro  N3  C probes (cabinet p  90 Ω @ 25 °C, 77 °F  10 °C (from -58 to 3)	ovided by a
Power 230 W 12-24 SELV C Earthir Rated Over-V Softwa	supply AC (+10° VAC/DC class 2 sing methor impulse- voltage class gue input	JE  % -15%), 50/60 (+10% -15%), burce but for the control withstand voltage attegory and structure s Sensor type Measurement file Resolution Sensor type	Hz (± 50/60 bl devi	3 Hz), ma Hz (±3 ł	None 4 KV III; II A 1 for F KTY 8 From 0.1 °C β3435	in EV3  PTC or NT 1-121 (9° 50 to 15 (1°F) (10 K (10 K (10 K))	1907/2006  JE  Jed in EV3 N7  2W in EV3 N3, pro  N3  TC probes (cabinet p  90 Ω @ 25 °C, 77 °F  10 °C (from -58 to 3)  Ω @ 25 °C, 77 °F	povided by a
EMC 2 Power 230 W 12-24 SELV C Earthin Rated Over-V Softwa Analog	supply AC (+10° VAC/DC class 2 sing methor impulse- voltage class gue input	W-15%), 50/60 (+10% -15%), burce but for the control withstand voltage ategory and structure s Sensor type Measurement file Resolution Sensor type Measurement file Measurement	Hz (± 50/60 bl devi	3 Hz), ma Hz (±3 ł	None 4 KV III; II A 1 for F KTY 8 From 0.1 °C 63435 From	in EV3  PTC or NT 1-121 (94 -50 to 15 (1 °F) (10 K 0	1907/2006  JE  ad in EV3 N7  2W in EV3 N3, pro  N3  C probes (cabinet p  90 Ω @ 25 °C, 77 °F  10 °C (from -58 to 3)	povided by a
EMC 2: Power 230 W 12-24 SELV C Earthir Rated Over-N Softwa Analog PTC pr	supply AC (+10' VAC/DC class 2 so ng metho impulse- voltage co are class gue input robes	JE  % -15%), 50/60 (+10% -15%), burce but for the control withstand voltage attegory and structure s Sensor type Measurement file Resolution Sensor type	Hz (± 50/60 bl devi	3 Hz), ma Hz (±3 H	None 4 KV III; II A 1 for F KTY 8 From 0.1 °C 63435 From 0.1 °C	in EV3  PTC or NT 1-121 (9° -50 to 15 (1°F) (10 K \( \text{L} \) 40 to 10 (1°F)	1907/2006  JE  ad in EV3 N7  2W in EV3 N3, pro  N3  TC probes (cabinet p 90 Ω @ 25 °C, 77 °F 10 °C (from -58 to 3)  2 @ 25 °C, 77 °F)  J5 °C (from -40 to 2)	povided by a  porrobe) F) 02 °F) 21 °F)
EMC 2 Power 230 W 12-24 SELV C Earthin Rated Over-V Softwa Analog	supply AC (+10' VAC/DC class 2 so ng metho impulse- voltage co are class gue input robes	W-15%), 50/60 (+10% -15%), burce but for the control withstand voltage ategory and structure s Sensor type Measurement file Resolution Sensor type Measurement file Measurement	Hz (± 550/60 ol devi	3 Hz), ma Hz (±3 H	None 4 KV III; II A 1 for F KTY 8 From 0.1 °C 63435 From 0.1 °C able fo	in EV3  PTC or NT 1-121 (9° -50 to 15° (1° °F) (10 K \( \tilde{\tilde	1907/2006  JE  ad in EV3 N7  2W in EV3 N3, pro  N3  TC probes (cabinet p 90 Ω @ 25 °C, 77 °F 10 °C (from -58 to 3)  Ω @ 25 °C, 77 °F)  J5 °C (from -40 to 2)  Jue input (auxiliary	povided by a probe)  F)  O2 °F)  probe) or
EMC 22 Power 230 V/ 12-24 SELV of Earthir Rated Over-V Softwa Analog PTC pr	supply AC (+10° VAC/DC class 2 so ng metho impulse- voltage c are class gue input robes  robes  inputs	W-15%), 50/60 (+10% -15%), burce but for the control withstand voltage ategory and structure s Sensor type Measurement file Resolution Sensor type Measurement file Measurement	Hz (± 550/60 ol devi	3 Hz), ma Hz (±3 h cce configur I input (de	None 4 KV III; II A 1 for F KTY 8 From 0.1 °C 63435 From 0.1 °C able fo	in EV3  PTC or NT 1-121 (9° -50 to 15° (1° °F) (10 K \( \tilde{\tilde	1907/2006  JE  ad in EV3 N7  2W in EV3 N3, pro  N3  TC probes (cabinet p 90 Ω @ 25 °C, 77 °F 10 °C (from -58 to 3)  Q @ 25 °C, 77 °F)  J5 °C (from -40 to 2)  Jue input (auxiliary  purpose, dry conta	povided by a probe)  F)  O2 °F)  probe) or
EMC 2: Power 230 W 12-24 SELV C Earthir Rated Over-N Softwa Analog PTC pr	supply AC (+10° VAC/DC class 2 so ng metho impulse- voltage c are class gue input robes  robes  inputs	W-15%), 50/60 (+10% -15%), burce but for the control withstand voltage ategory and structure s Sensor type Measurement file Resolution Sensor type Measurement file Measurement	Hz (± 50/60 bl devi	3 Hz), ma Hz (±3 h	None 4 KV III; II A 1 for F KTY 8 From 0.1 °C 63435 From 0.1 °C able fo	in EV3  PTC or NT 1-121 (9° -50 to 15° (1° °F) (10 K \( \tilde{\tilde	1907/2006  JE  ad in EV3 N7  2W in EV3 N3, pro  N3  TC probes (cabinet p 90 Ω @ 25 °C, 77 °F 0 °C (from -58 to 3)  Δ @ 25 °C, 77 °F)  J5 °C (from -40 to 2)  Jue input (auxiliary -purpose, dry conta	povided by a probe)  F)  O2 °F)  probe) or
EMC 22 Power 230 V/ 12-24 SELV of Earthir Rated Over-V Softwa Analog PTC pr	supply AC (+10° VAC/DC class 2 so ng metho impulse- voltage c are class gue input robes  robes  inputs	W-15%), 50/60 (+10% -15%), burce but for the control withstand voltage ategory and structure s Sensor type Measurement file Resolution Sensor type Measurement file Measurement	Hz (± 50/60 bl devi	3 Hz), ma Hz (±3 H  ce  configur I input (dict type	None 4 KV III; II A 1 for F KTY 8 From 0.1 °C 63435 From 0.1 °C able fo	in EV3  PTC or NT 1-121 (9° -50 to 15° (1° °F) (10 K \( \tilde{\tilde	1907/2006  JE  ad in EV3 N7  2W in EV3 N3, pro  N3  TC probes (cabinet p 90 Ω @ 25 °C, 77 °F) 0 °C (from -58 to 3)  2 @ 25 °C, 77 °F)  με input (auxiliary -purpose, dry conta- 5 VDC, 1.5 mA  None	povided by a probe)  F)  O2 °F)  probe) or
EMC 2 Power 230 W 12-24 SELV C Earthir Rated Over- Softwa Analog PTC pr	supply AC (+10° VAC/DC class 2 sing method impulse- voltage co are class gue input obes  robes  inputs inputs	JE  % -15%), 50/60 (+10% -15%), surce odds for the control withstand voltage ategory and structure s Sensor type Measurement file Resolution Sensor type Measurement file Resolution	Hz (± 50/60 ol devide eld linput digital Conta Power Protect	3 Hz), ma Hz (±3 H  ce  configur linput (dict type r supply	LVD 2ixx. 2 VA tz), ma  None 4 KV 111; 11 A 1 for F KTY 8' 63435 From 0.1 °C able fo	in EV3  PTC or NT1-121 (9° -50 to 15 (1°F) (10 K 0.0 (1°F) r analogich/multi	1907/2006  JE  ad in EV3 N7  2W in EV3 N3, pro  N3  C probes (cabinet p 90 Ω @ 25 °C, 77 °F) 0 °C (from -58 to 3)  2 @ 25 °C, 77 °F)  Use input (auxiliary -purpose, dry contact 5 VDC, 1.5 mA  None  None	povided by a probe)  F)  O2 °F)  probe) or
EMC 22 Power 230 V/ 12-24 SELV C Earthir Rated Over-N Softwa Analog PTC pr  Other  Dry co	supply AC (+10° VAC/DC class 2 sing method impulse- voltage controlled are class gue input obes inputs inputs outputs	JE  % -15%), 50/60 (+10% -15%), ource ods for the control withstand voltag ategory and structure s Sensor type Measurement file Resolution Sensor type Measurement file Resolution	Hz (± 50/60 ol devide eld linput digital Contar Protect 1 elect 1 elect eld linput 1 elect eld	a Hz), ma Hz (±3 H ce configur I input (d cit type supply ction ctro-mech	None 4 KV III; II A 1 for F From 0.1 °C 63435 From 9.1 °C 63435 From 4 KTY 8' 6 R 6 R 6 R 6 R 6 R 6 R 6 R 6 R 6 R 6 R	in EV3  PTC or NT 1-121 (9° -50 to 15 (1°F) (10 K 0 (1°F) r analog	1907/2006  JE  ad in EV3 N7  2W in EV3 N3, pro  N3  TC probes (cabinet p 90 Ω @ 25 °C, 77 °F) 0 °C (from -58 to 3)  2 @ 25 °C, 77 °F)  με input (auxiliary -purpose, dry conta- 5 VDC, 1.5 mA  None	povided by a probe)  F)  O2 °F)  probe) or
EMC 22 Power 230 V/ 12-24 SELV C Earthir Rated Over-N Softwa Analog PTC pr  NTC pr  Other  Dry co	supply AC (+10° VAC/DC class 2 sing method impulse- voltage colored co	JE  % -15%), 50/60 (+10% -15%), ource ods for the control withstand voltag ategory and structure s Sensor type Measurement fir Resolution Sensor type Measurement fir Resolution	Hz (± 50/60 ol devide eld linput digital Contar Protect 1 elect 1 elect eld linput 1 elect eld	3 Hz), ma Hz (±3 H  ce  configur linput (dict type r supply	None 4 KV III; II A 1 for F From 0.1 °C 83435 From 0.1 °C able for swith anical r . @ 250	in EV3  PTC or NT 1-121 (9º -50 to 15 (1 °F) (10 K 0 (1 °F) r analog cch/multi	1907/2006  JE  ad in EV3 N7  2W in EV3 N3, pro  N3  C probes (cabinet p 90 Ω @ 25 °C, 77 °F) 0 °C (from -58 to 3)  2 @ 25 °C, 77 °F)  Use input (auxiliary -purpose, dry contact 5 VDC, 1.5 mA  None  None	povided by a probe)  F)  O2 °F)  probe) or
EMC 22 Power 230 V/ 12-24 SELV C Earthir Rated Over-V Softwa Analog PTC pr  Other  Dry co  Digital Compr Type 1	supply AC (+10° VAC/DC class 2 signer impulse- roltage class gue input robes  robes  inputs  outputs essor re or Type	JE  % -15%), 50/60 (+10% -15%), ource ods for the control withstand voltage ategory and structure s Sensor type Measurement file Resolution Sensor type Measurement file Resolution	Hz (± 50/60 bl devi	3 Hz), ma Hz (±3 H ce configur Linput (dict type r supply ction ttro-mech 16 A res	LVD 20  None 4 KV III; II A 1 for F KTY 8 63435 From 0.1 °C able fo coor switt  anical r . @ 250 Type 1	in EV3  PTC or NT 1-121 (9º -50 to 15 (1 °F) (10 K 0 (1 °F) r analog cch/multi	1907/2006  JE  ad in EV3 N7  2W in EV3 N3, pro  N3  C probes (cabinet p 90 Ω @ 25 °C, 77 °F) 0 °C (from -58 to 3)  2 @ 25 °C, 77 °F)  Use input (auxiliary -purpose, dry contact 5 VDC, 1.5 mA  None  None	povided by a probe)  F)  O2 °F)  probe) or
Power 230 W 12-24 SELV C Earthin Rated Over-V Softwa Analog PTC pr Other Dry co	supply AC (+10° VAC/DC class 2 signer impulse- roltage class gue input robes  robes  inputs  outputs essor re or Type	JE  % -15%), 50/60 (+10% -15%), ource ods for the control withstand voltag ategory and structure s Sensor type Measurement fir Resolution Sensor type Measurement fir Resolution	Hz (± 50/60 bl devi	3 Hz), ma Hz (±3 H ce configur Linput (dict type r supply ction ttro-mech 16 A res	None 4 KV III; II A 1 for F From 0.1 °C 83435 From 0.1 °C able for swith anical r . @ 250	in EV3  PTC or NT 1-121 (9º -50 to 15 (1 °F) (10 K 0 (1 °F) r analog cch/multi	1907/2006  JE  ad in EV3 N7  2W in EV3 N3, pro  N3  C probes (cabinet p 90 Ω @ 25 °C, 77 °F) 0 °C (from -58 to 3)  2 @ 25 °C, 77 °F)  Use input (auxiliary -purpose, dry contact 5 VDC, 1.5 mA  None  None	povided by a probe)  F)  O2 °F)  probe) or
EMC 22 Power 230 V/ 12-24 SELV C Earthir Rated Over-V Softwa Analog PTC pr  Other  Dry co  Digital Compr Type 1	supply AC (+10° VAC/DC class 2 signed impulse- robes robes inputs outputs essor re or Type onal feat	JE  % -15%), 50/60 (+10% -15%), ource ods for the control withstand voltage ategory and structure s Sensor type Measurement file Resolution Sensor type Measurement file Resolution	Hz (± 50/60 bl devi	3 Hz), ma Hz (±3 H ce configur Linput (dict type r supply ction ttro-mech 16 A res	LVD 2ix. 2 VAAiz), ma  None 4 KV III; II A 1 for F KTY 8: 63435 0.1 °C able for boor swill anical r C C	in EV3  PTC or NT 1-121 (9° -50 to 15 (1°F) (10 K © -40 to 10 (1°F) r analog sch/multi-	1907/2006  JE  ad in EV3 N7  2W in EV3 N3, pro  N3  C probes (cabinet p 90 Ω @ 25 °C, 77 °F) 0 °C (from -58 to 3)  2 @ 25 °C, 77 °F)  Use input (auxiliary -purpose, dry contact 5 VDC, 1.5 mA  None  None	ovided by a  orobe) F) 02 °F)  probe) or ct)



N.B.
The device must be disposed of according to local regulations governing the collection of electrical and electronic waste.

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