

# E31/E33

- THERMOSTATS AND CONTROLLERS FOR REFRIGERATING UNITS
- ENERGY SAVING FUNCTIONS



## FEATURES

	E31	E33
<b>DISPLAY</b>	3 red or blue digit, h 17.7 mm	
<b>INPUTS</b>	1 digital input for free voltage contacts as alternative to input 2	
Two (e31) or Three (e33)	2x NTC 103AT-2 (10kΩ at 25°C) -50... +109°C (-58... +228°F)	3x NTC 103AT-2 (10kΩ at 25°C) -50... +109°C (-58... +228°F)
Digital input	1 digital input for free voltage contacts as alternative to one of the measuring inputs	
Accuracy	± 0.5 % fs + 1 digit	
<b>OUTPUTS</b>	Up to 3 relays.	
One (e31) or Three (e33)	Relay SPST-NO (30A - 2HP 250V, 1HP 125 VAC); EN 61810: 30 (15) A - EN 60730: 15 (15)A- UL 60730: 15 A Res., 96 LRA, 16 FLA or Relay SPST-NO (16A - 1HP 250V, 1/2HP 125 VAC); EN 61810: 16 (9) A - EN 60730: 10 (4)A- UL 60730: 12 A Res., 30 LRA, 5 FLA or Relay SPDT (16A - 1HP 250V, 1/2HP 125 VAC); EN 61810: 16 (9) A - EN 60730: 10 (4)A- UL 60730: 12 A Res., 30 LRA, 5 FLA  12 A max. for plug-in version	OUT1: Relay SPST-NO (30A - 2HP 250V, 1HP 125 VAC); EN 61810: 30 (15) A - EN 60730: 15 (15)A- UL 60730: 15 A Res., 96 LRA, 16 FLA or Relay SPST-NO (16A - 1HP 250V, 1/2HP 125 VAC); EN 61810: 16 (9) A - EN 60730: 10 (4) A - UL 60730: 12 A Res., 30 LRA, 5 FLA  OUT2: Relay SPDT (8A - 1/2 HP 250 VAC, 1/3 HP 125 VAC); EN 61810: 8 (3) A - EN 60730: 8 (4) A - UL 60730: 10 A Res.  OUT3: Relay SPST-NO (5A - 1/10HP 125/250 VAC); EN 61810: 5 (1) A - EN 60730: 2 (1)A - UL 60730: 2 A Res.Gen.Use  12 A max. for plug-in version
	Relay operations	100000 operations
<b>FUNCTIONAL</b>	ON/OFF	
Control	Internal Buzzer (optional)	
Acoustic alarm	At intervals time, at reaching temperature by stopping compressor, by electrical heating or hot gas/reverse cycle	
Defrosting control	At interval time by stopping compressor	At intervals time, at reaching temperature by stopping compressor, by electrical heating or hot gas/reverse cycle
Energy Saving functions	Available	
Serial communication	TTL for parameters configuration only	
<b>GENERAL</b>	12 VAC/VDC, 230 VAC, 115 VAC ±10% (50/60 Hz)	
Power supply	3 VA approx.	
Power consumption	78 x 35 mm - depth 64 mm or 75.5 mm with plug-in terminals / 150g approx.	
Dimensions / Weight	78 x 35 mm - depth 64 mm or 75.5 mm with plug-in terminals / 190g approx.	
Keyboard	Mechanical	
Connections	Inputs: Screw terminal block or plug-in connector for cables from 0.2 ÷ 2.5 mm <sup>2</sup> /AWG 24 ÷ 14; Power supply and outputs: Screw terminal block or plug-in connector or Faston 6.3 for cables from 0.2 ÷ 2.5 mm <sup>2</sup> /AWG 24 ÷ 14	
Mounting	Flush in panel in 71 x 29 mm hole	
Front protection degree	IP65 (NEMA 3S), mounted in panel with gasket and screw brackets	
Operating / storage temperature	0... +50°C (32... +122°F) / -25... +60°C (-13... +140°F)	
Operating humidity	<95 RH% without condensation	
Conformity	Directive 2004/108/CE (EN55022: class B; EN61000-4-2: 8kV air, 4kV cont.; EN61000-4-3: 10V/m; EN61000-4-4: 2kV power supply and relay outputs, 1kV inputs; EN61000-4-5: power supply 2kV com. mode, 1 kVdiff.mode; EN61000-4-6: 3V), Directive 2006/95/CE (EN 60730-1, EN 60730-2-9), Regulation 37/2005/CE (EN13485 air, S, A, 2, -50°C +90°C wheter used with NTC 103AT1 probe).	

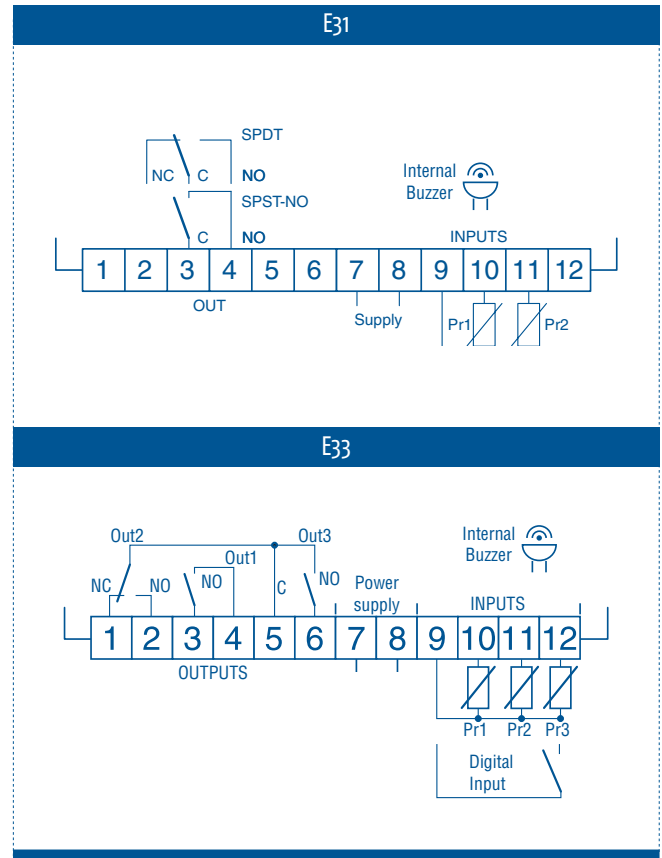
# HOW TO ORDER

To compose the part number, pls. choose one of the option for each variable

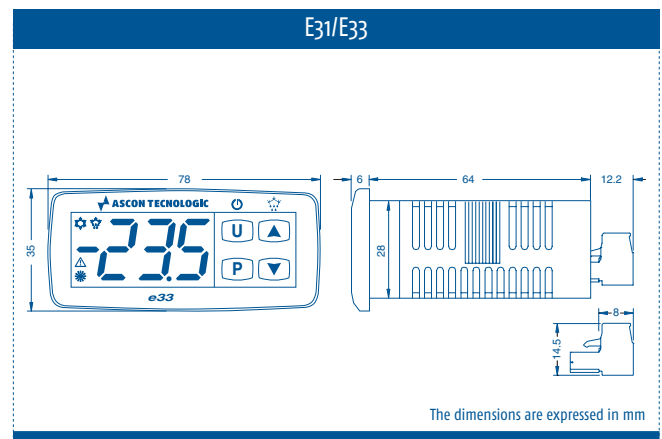
E31	CODE
<b>KEYBOARD</b>	
Mechanical	-
<b>POWER SUPPLY</b>	
12 VAC/DC	F
115 VAC	C
230 VAC	D
<b>OUT 1</b>	
Relay SPST-NO 30A-AC1	H
Relay SPST-NO 16A-AC1	R
Relay SPDT 16A-AC1	S
<b>BUZZER (INTERNAL)</b>	
Available	B
Not available	-
<b>CONNECTION</b>	
Plug-in screw type	E
Plug-in screw type, fix part only	N
Fix screw type (standard)	V
<b>INPUTS CONNECTIONS</b>	
Plug-in screw type	E
Plug-in screw type, fix part only	N
Fix screw type (standard)	V
<b>DISPLAY</b>	
Blue+icons	C
Red (standard)	I

E33	CODE
<b>KEYBOARD</b>	
Mechanical	-
<b>POWER SUPPLY</b>	
12 VAC/DC	F
115 VAC	C
230 VAC	D
<b>OUT 1</b>	
Relay SPST-NO 30A-AC1	H
Relay SPST-NO 16A-AC1	R
<b>OUT 2</b>	
Relay SPDT 8A-AC1	R
Not available	-
<b>OUT 3</b>	
Relay SPST-NO 5A-AC1	R
Not available	-
<b>BUZZER (INTERNAL)</b>	
Available	B
Not available	-
<b>CONNECTION</b>	
Plug-in screw type	E
Plug-in screw type, fix part only	N
Fix screw type (standard)	V
<b>INPUTS CONNECTION</b>	
Plug-in screw type	E
Plug-in screw type, fix part only	N
Fix screw type (standard)	V
<b>DISPLAY</b>	
Blue+icons	C
Red (standard)	I

# CONNECTIONS



# DIMENSIONS



The dimensions are expressed in mm

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Temperature Sensor Modules](#) category:*

*Click to view products by [Ascon](#) manufacturer:*

Other Similar products are found below :

[HPP809A031](#) [MBT 3560-0000-0050-10-110](#) [MBT 3560-0000-0100-10-110](#) [MBT 3560-0001-0050-10-120](#) [MBT 3560-0001-0100-10-120](#)  
[TCN4L-22R](#) [TX4H-14R](#) [TX4H-24R](#) [TX4H-A4R](#) [TX4H-B4R](#) [TX4L-14R](#) [TX4L-A4R](#) [TX4L-B4R](#) [TX4M-14R](#) [TX4M-24R](#) [TX4M-A4R](#)  
[TX4M-B4R](#) [QP99](#) [CP-02](#) [CP82](#) [CP99](#) [R38-LAOO](#) [R38-LARR](#) [72-11304023-0150.0050](#) [72-11304027-0150.0050](#) [72-23304003-](#)  
[0150.0050.GGP](#) [72-23904001-0300.0040.TM](#) [72-34904001-0300.0040.TM](#) [TEM 73 A](#) [AT403-414-1000](#) [AT403-614-1000](#) [AT-503-1141-000](#)  
[AT-503-1161-000](#) [AT-503-6140-000](#) [AT-603-1141-000](#) [AT603-414-1000](#) [AT-903-1161-000](#) [ATR121-AD](#) [ATR121-B](#) [TPMC-5](#) [TPMC-8W](#)  
[K39-HCRR](#) [K39T-HCRR](#) [K49-HCRR](#) [K49P-HCRR](#) [K85-HERR](#) [KR1-LCRR-D](#) [LHI874](#) [LHI944](#) [LHI968](#)