E31/E33

- THERMOSTATS AND CONTROLLERS FOR REFRIGERATING UNITS
- ENERGY SAVING FUNCTIONS

FEATURES

DISPLAY	E31	E33
Single	3 red or blue digit, h 17.7 mm	
INPUTS		
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 input 2	1 digital input for free voltage contacts as alternative to one of the measuring inputs
Accuracy	± 0.5 % fs + 1 digit	
OUTPUTS		
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 12 A max. for plug-in version	Up to 3 relays. 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	
FUNCTIONAL		
Control	ON/OFF	
Acoustic alarm	Internal Buzzer (optional)	
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	
GENERAL		
Power supply	12 VAC/VDC, 230 VAC, 115 VAC ±10% (50/60 Hz)	
Power consumption	3 VA approx.	3.5 VA approx.
Dimensions / Weight	78 x 35 mm - depth 64 mm or 75.5 mm with plug-in terminals / 150g approx.	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 mm2/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 mm2/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 brakets	
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 kV\diff.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 103AT11 probe).	

HOW TO ORDER

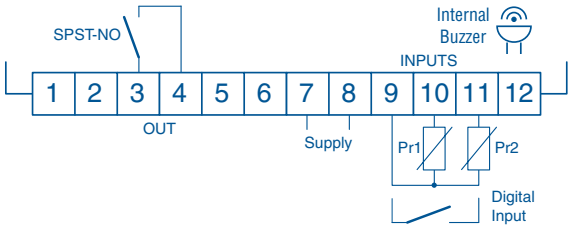
To compose the part number, pls. choose one of the option for each variable

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

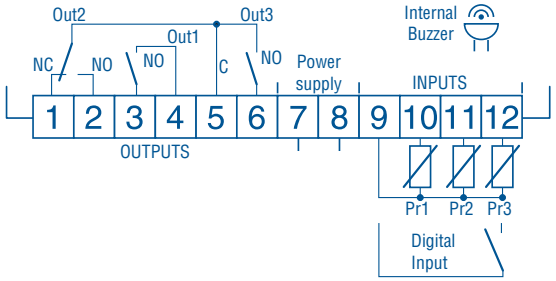
E33	CODE
KEYBOARD	
Mechanical	-
POWER SUPPLY	
12 VAC/DC	F
115 VAC	C
230 VAC	D
OUT 1	
Relay SPST-NO 30A-AC1	H
Relay SPST-NO 16A-AC1	R
OUT 2	
Relay SPDT 8A-AC1	R
Not available	-
OUT 3	
Relay SPST-NO 5A-AC1	R
Not available	-
BUZZER (INTERNAL)	
Available	B
Not available	-
CONNECTION	
Plug-in screw type	E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

CONNECTIONS

E31

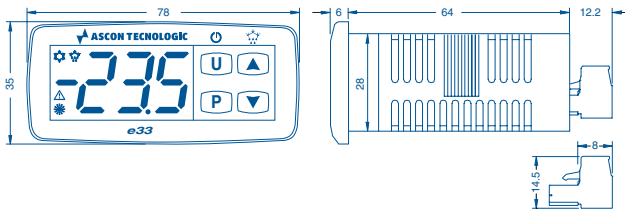


E33



DIMENSIONS

E31/E33



The dimensions are expressed in mm