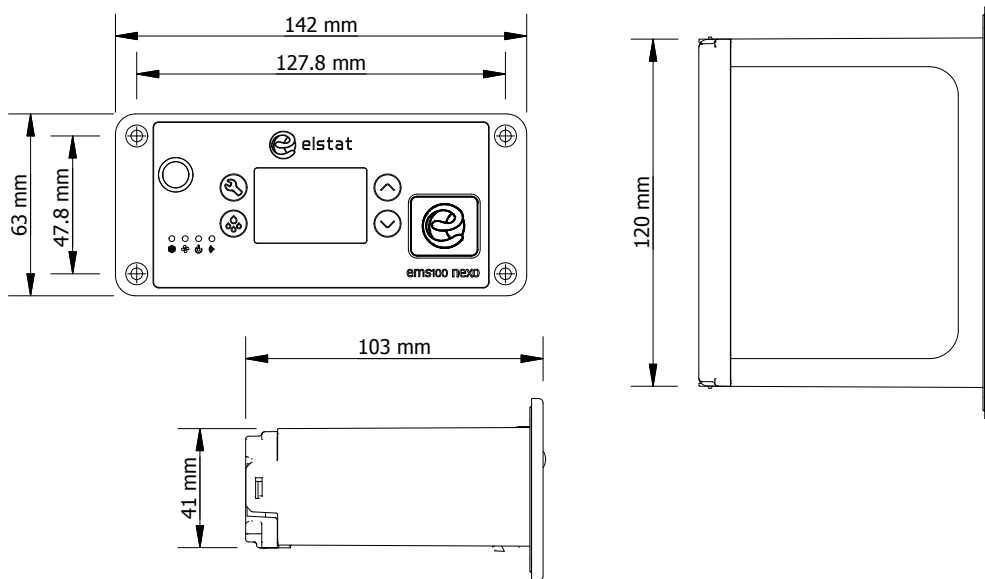


### USER INTERFACE

The ems100 controller is a connected unit used for energy management efficiency. This controller collates and communicates data from within the field. The ems100 is available with a remote or integrated motion sensor to allow flexibility when installing into different types of coolers.

DISPLAY	LEDS	BUTTONS
	 Compressor	 Set
	 Evaporator fan	 Defrost
	 Saving temperature disable	 Up
	 Motion	 Down

### OVERALL DIMENSIONS



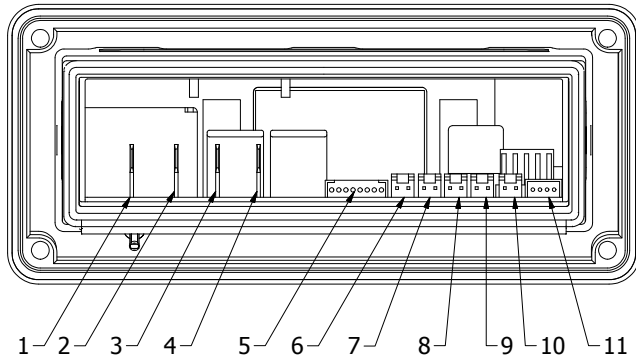
### ENVIRONMENTAL RATINGS

CHARACTERISTIC	VALUE
IP (Ingress Protection) Rating	IP45 Front Facia, IP24 All Over
Maximum ambient temperature	55°C (131°F)

### TEMPERATURE INPUT RANGES

SENSOR	INPUT RANGE (°C)	INPUT RANGE (°F)
Appliance sensor	-15°C to 50°C +/- 0.5°C	5°F to 122°F +/- 1°F
Condenser sensor	50°C to 125°C +/- 5.0°C	122°F to 257°F +/- 10°F
Evaporator sensor	-15°C to 50°C +/- 0.5°C	5°F to 122°F +/- 1°F

### ELECTRICAL CONNECTIONS



- 1 Compressor
- 2 Line in
- 3 Fan(s)
- 4 Light(s)
- 5 Product Sensor
- 6 12VAC
- 7 Evaporator Sensor
- 8 Door
- 9 Condenser Sensor
- 10 Appliance Sensor
- 11 Remote Motion Detector (If applicable)

### RELAY RATINGS

Relay	Maximum IEC rating @100-240VAC	Maximum UL ratings @ 120VAC
Compressor	10 (10) A, p.f. 0.6	16 FLA, 96 LRA
Lights	4 (4) A, p.f. 0.6	250W ballast
Evaporator fan	4 (4) A, p.f. 0.6	4.4 FLA, 13.1 LRA

### PRODUCT APPROVALS

Conformité Européene / European Conformity (CE)  
EN60730-1 / EN60730-2-9



Agência Nacional de Telecomunicações (ANATEL)  
Resolução Anatel nº 242



European Norms Electrical Certification (ENEC)  
EN60730-1 / EN60730-2-9



Bluetooth Special Interest Group (SIG)  
Bluetooth ® Qualified Design



International Electrotechnical Commission (IEC)  
IEC60730-1 / IEC60730-2-9  
Glow wire / IEC60335-1



La Comisión Nacional de Comunicaciones (CNC)  
Resolución SC 729/80 - Resolución SC 784/87



North America (including Canada) - UL mark (Component recognition)  
UL 60730-1 / CSA E60730-1  
UL 60730-2-9 / CSA E60730-2-9



European Telecommunications Standards Institute (ETSI)  
EN300 328 V1.8.1



Federal Communications Commission (FCC)  
FCC Part 15.107 & 15.109



Federal Communications Commission (FCC)  
Part 15C



European Telecommunications Standards Institute (ETSI)  
EN301 489-1



Instituto Federal de Telecomunicaciones (IFETEL)  
NOM-121-SCT1-2009

EMC  
Electromagnetic Compatibility (EMC)  
EN55014-1, EN55014-2, EN61000-6-1, EN61000-6-3, EN61000-3-2, EN61000-3-3



Industry Canada

Industrie Canada

RSS-GEN,  
RSS-102,  
RSS-247