

# RTN400

Controllers for plug-in and ducted cabinets with thermostatic valve control



**ENVIRONMENTALLY  
OPTIMISED**



REFRIGERATION SYSTEMS



- Energy saving: optimised defrosting control
- Compact: direct control of loads of up to 2HP
- Advanced compressor protection
- Easy to install and configure
- LAN plug-n-play controller connection in an island



## DESCRIPTION

**RTN400** controllers are compact and stand out for the high-performance and high flexibility they offer through energy-saving algorithms and the direct control of fans and compressors.

The main features of **RTN400** controllers are:

- relay of up to **2HP** for direct control of loads.
- single or dual compressor control.
- defrost with advanced electrical heaters.
- evaporator fan control in Night&Day mode.
- fixed duty-cycle frame heater control.
- clock for managing defrosts, keeps time for over 3 years.
- reduced maintenance thanks to the protection of the compressor/fans against voltage fluctuations.
- rapid synchronisation of ducted cabinets and island cabinets with **Link<sup>2</sup>** plug-n-play.
- monitoring gateway (needs only one controller connected to the RS485 per island).
- disconnectable terminals and customised quick connections for OEMs.
- pre-programmed, easy-to-select configurations.
- Device Manager configuration tool.

**RTN400** controllers can be interfaced with **KDEPlus** and **KDWPlus** keypads and with the **ECPlus** display module.

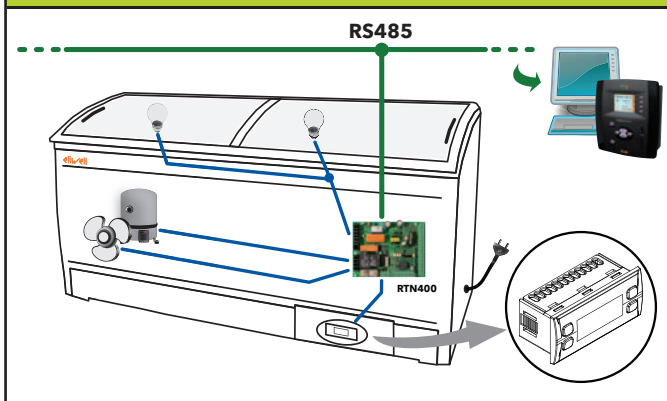


## TECHNICAL SPECIFICATIONS

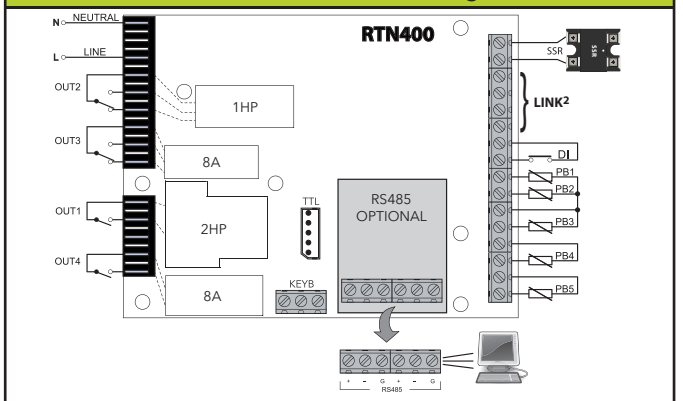
Dimensions:	121x92 mm
Mounting:	Open card with plastic spacers
Power supply:	SMPS 100-240V~ ±10% 50/60Hz
Inputs:	<ul style="list-style-type: none"> <li>• 5 NTC/PTC/PT1000/D.I. inputs</li> <li>• 1 no-voltage input</li> </ul>
Outputs	1 x Open Collector (12V <sub>DC</sub> - 20mA) output
Relays:	<ul style="list-style-type: none"> <li>• 1 x SPST 2HP - 250V~ relay</li> <li>• 1 x SPDT 16A - 250V~ relay</li> <li>• 1 x SPDT 8A - 250V~ relay</li> <li>• 1 x SPST 8A - 250V~ relay</li> </ul>
Connections:	<ul style="list-style-type: none"> <li>• 1 voltage serial for keypad (KDEPlus, KDWPlus, ECPlus)</li> <li>• 1 voltage serial for LAN</li> <li>• 1 for Modbus connection to TelevisSystem supervisor or third parties (RS485 with optional module)</li> </ul>
Programming Parameters:	1 TTL for connection to: <ul style="list-style-type: none"> <li>- Eliwell Unicard USB</li> <li>- Copycard</li> <li>- DMI interface for <b>DeviceManager</b></li> </ul>
Connectors:	fast-on and screw connectors

**\* For other configurations, please contact the Eliwell sales department (fast-on and disconnectable terminals, etc.).**

### RTN400: PLUG-IN cabinet with thermostatic control



### RTN400: Connection Diagram



## ACCESSORIES

	RTN533P1M6H00	RTN400 5P/O/C/Y/MC
	KDE400E004000	KDEPlus 32x74 AMB SCREW/JST SP
	KDW6004004080	KDEPlus 32x74 AMB SCREW/JST SP
	EH000050V4000	KDEPlus 32x74 AMB SCREW/JST SP
	KP00Q150	RS485 BusAdapter W/MKSDN SP

	<b>Temperature probes</b>	SN8DAE11502C0	NTC 1.5m IP 68 6x20 -50+110 °C
		SN8DAE13002C0	NTC 3.0m IP68 6x20 -50...+110 °C
		SN9DAE11502C6	PT1000 1.5m IP68 6x20 -50...+110 °C
		SN9DAE13002C6	PT1000 3.0m IP68 6x20 -50...+110 °C
		SN7DAE11502C0	PTC 1.5m IP68 6x20 -50...+110 °C
		SN7DAE13002C0	PTC 3.0m IP68 6x20 -50...+110 °C
	<b>Unicard</b>	CCA0BHT00U00	UNICARD USB/TTL
		COLV000016200	USB-A/A 2 MT EXTENSION LEAD
		BT111120	USB MAINS POWER SUPPLY

### ELIWELL CONTROLS srl

Via dell'Industria, 15  
Z.I. Paludi  
32010 Pieve d'Alpago (BL)  
- ITALY -

Telephone: +39 0437 986 111

Fax +39 0437 989 066

[www.eliwell.com](http://www.eliwell.com)

### Sales:

+39 0437 986 100 (Italy)  
+39 0437 986 200 (other countries)  
[saleseliwell@invensys.com](mailto:saleseliwell@invensys.com)

### Technical Support:

+39 0437 986 300  
[techsuppeliwell@invensys.com](mailto:techsuppeliwell@invensys.com)

