

# EXTENDED CONTROLLER ELECTRONICS AND CONTROLS FOR ADVANCED HEAT PUMPS

CF-120-3 EN



## LMC320i EXTENDED



# **LMC320i EXTENDED CONTROLLER** FOR HEAT PUMPS



LMC320i EXTENDED is a configurable, pre-programmed heat pump controller with extended I/O's. It is specially designed for advanced heat pumps, including brine/water, air/water, water/water, air/air and domestic hot water. The controller ensures optimal indoor climate and optimizes your heat pump to save time, cost and energy.

#### ENERGY EFFICIENT CONTROL

Capacity control your heat pump in periods of fluctuating heating or

cooling needs. Optimize heat pump operation with electronic expansion valve control algorithms for a higher SCOP.

#### **OPTIMAL SYSTEM PROTECTION**

Unique integration with BITZER IQ MODULES for optimal safety and protection of your system. The BITZER IQ bus shares all necessary information with the controller to keep the heat pump operating energy efficient and protected under all conditions.

### >> YOUR ADVANTAGES

- // Energy and cost saving through
  intelligent capacity control and
  defrost scheduling
- // 16 pre-defined applications ensuring easy installation with configurable setup to fit your unique heat pump
- // Electronic Expansion Valve control to optimize operation and a higher SCOP

Technical specifications	
BITZER Electronics part no.	399000658
Size	185mm (l) x 110mm (w) x 61mm (h)
Power supply	110 - 230VAC 50-60 Hz +/-10%; typical 4 VA, max. 18 VA
Operating temperature	-20°C ~ +60°C
Storage temperature	-30°C ~ +60°C
Enclosure protection	IP20, pollution degree 2
Relative humidity	5% - 95%RH, non-condensing
Temperature inputs	11 (+1 Extended) for BITZER Electronics NTC sensors $-40^{\circ}C \sim +99^{\circ}C$ ; +/- 1°C accuracy
Analogue inputs	2, AI1 to AI2; 0-5V with 5 Volt supply for radiometric pressure transmitters; Rin: 25KOhm.
Digital inputs	7, not galvanically isolated; 0 – 3.3V with pull-up resistor
Analogue outputs	6, AO0 to AO5; 0-10V, +/- 3%, Rin > 10KOhm; max frequency 1Hz
Relay outputs	RE1 to RE11: 10A 24VDC / 10A 250VAC resistive, max 0.75A inductive load; double isolation to low power side; max. 250VAC isolation between relays.
RS485 ports	2 with common 12V 80mA output; 1 used for display and 1 for future use
USB ports	1 device mode only for software update and communication with a PC
Real time clock	With 1 year battery back up
Datalog	1 year capacity
12VDC output	Up to 500 mA

### **RELATED PRODUCTS**

#### **BITZER SMART CONNECT**

Monitor and operate heat pumps remotely with BITZER SMART CONNECT cloud and app solution. Available for Apple iOS, Android, Windows and MAC computers.



#### **TOUCH DISPLAYS**

User friendly user panels with touch display and Wi-Fi functionality, specialy designed for heat pump applications by our experienced interaction designers.