iJW* SMALL 4 RELAY START GUIDE

MODELS AND OPTIONS

MODEL

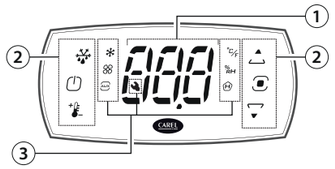
I	J	W	P	S	A	*	*	*	*	...

- Product family name
- Product name
- N. of relays: **2** = 2 relay; **4** = 4 relay
- Connectivity / RTC: **N** = NFC; **R** = NFC, RTC; **B** = NFC, RTC, Bluetooth
- Hardware option: **01** = TTL; **02** = BMS; **07** = BMS, 0...5V rat (humidity)

Tab.1

Note: iJW is designed to be connected in supervision via TTL or BMS port via Modbus protocol. For the use of the Carel protocol there are specific models for which reference is made to the product catalogue.

USER TERMINAL



Key:
1 display
2 icons/backlit buttons
3 icons

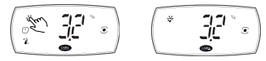
Backlit buttons/Icons

Button	Description	ON	Flashing
	Defrost	Active/Can be deactivated from the keypad	Waiting/ can be activated from the keypad
	On - Off	• Wake-up controller: On/ can be power off from the keypad • Go back in the parameters navigation	Off/ can be power on from the keypad
	Set point	Access temperature / humidity setpoint	-
	Up arrow	• Increase value • Scroll menu • Auxiliary function: active/ can be deactivated from the keypad	Auxiliary function: Waiting/ can be activated from the keypad

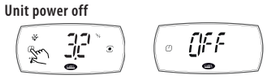
Button	Description	ON	Flashing
	Program	Pressed briefly: • wake-up controller • enter menu branch • save value and return to the parameter code Pressed and held (3 s): • enter programming mode	-
	Down arrow	• Decrease value • Scroll menu • Auxiliary function: active/ can be deactivated from the keypad	Auxiliary function: waiting/ can be activated from the keypad
	Compressor	Active	Waiting
	Evaporator fan	Active	-
	Auxiliary load	Active	-
°C/°F	°C/ °F	Temperature unit of measure °C/ °F	-
%rH	% rH	Relative humidity unit of measure %	-
	HACCP	Active HACCP alarms	-
	Service maintenance	Active alarms	-

NAVIGATION AND FUNCTIONS ACTIVATION

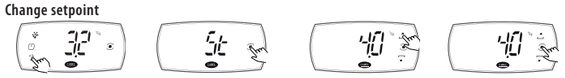
Manual defrost activation



Unit power off



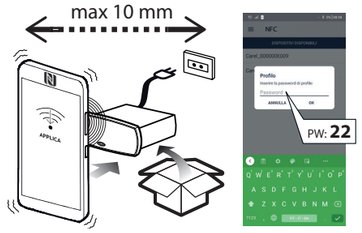
Change setpoint



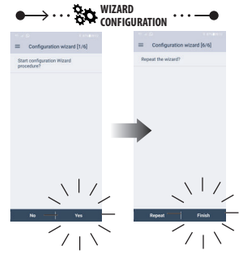
Parameter modification example

WIZARD CONFIGURATION MODE

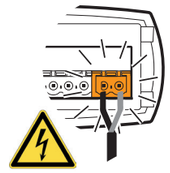
APPLICA - App per mobile
Info & Documentazione
Tutorial

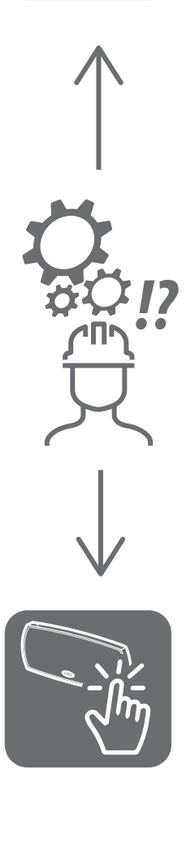


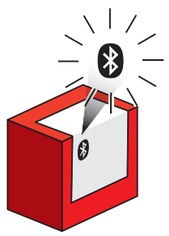
LETTURA CONFIGURAZIONE

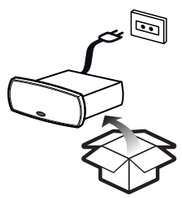


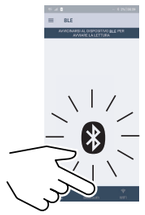
SCRITTURA CONFIGURAZIONE

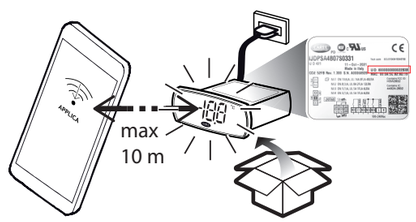




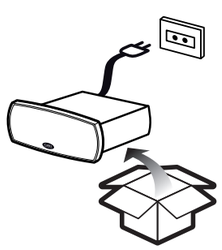


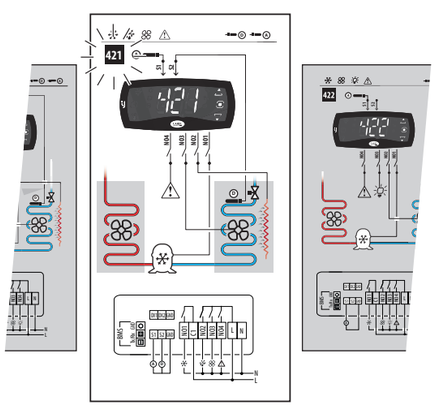


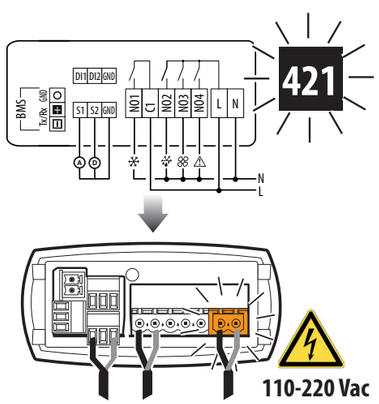


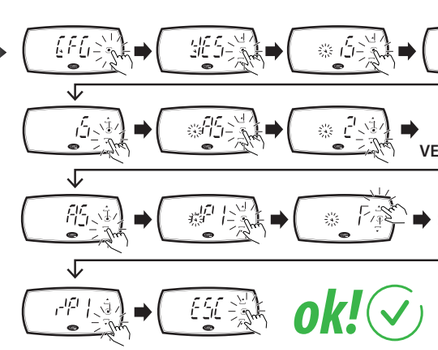


LETTURA E SCRITTURA CONFIGURAZIONE









WIZARD PARAMETERS

Cod.	Description
A5	Digital input 2 configuration: 0 No configured; 1 External alarm NO; 2 External alarm NC; 3 Door switch NO; 4 Door switch NC; 5 Remote ON/OFF NO; 6 Remote ON/OFF NC
/P1	Configuration probe: S1, S2, S3, S4: 0 PT1000; 1 PTC; 2 NTC; 3 NTC-LT; 4 NTC-HT
IS	Configuration to upload (0: no configuration selected)

TABLE OF PARAMETERS AVAILABLE FROM KEYBOARD

	Val.	Description	Def.	Min	Max	UoM
dir	Sc	Condenser temperature	Read only parameter			°C/°F
	Sd	Defrost temperature	Read only parameter			°C/°F
	Sm	Outlet temperature	Read only parameter			°C/°F
Ctl	St	Regulation temperature setpoint	50/122	r1	r2	°C/°F
	rd	Regulation temperature differential	2/3.6	0.1/0.2	99.9/179.2	Δ °C/°F
	Sth	Humidity set point	90	0.0	100	% rH
	rdh	Humidity differential	5	0.1	99.9	Δ % rH
	IS	Configuration to upload (0: no configuration selected)	-	-	IS_max	-
	r1	Minimum temperature setpoint	-50/-58	-99/-146	r2	°C/°F
	r2	Maximum temperature setpoint	50/122	r1	200/392	°C/°F
	rn	Neutral zone	4/7.2	0	60/108	°C/°F
	/4	Virtual probe composition: 0 = Air off (Sm)100 = Air ON (Sr)	0	0	100	%
	rSC	Restore to Carel settings	0	0	1	-
Pro	/5	Unit of measure: 0=°C, 1=°F	0	0	1	-
	/6	Decimal point visualization in main mask: 0=Visible, 1=Not visible	0	0	1	-
	/cA	Outlet temperature probe offset calibration	0	-20/-36	20/36	°C/°F
	/cb	Defrost temperature probe offset calibration	0	-20/-36	20/36	°C/°F
	/cc	Intake temperature probe offset calibration	0	-20/-36	20/36	°C/°F
	/nE	Enable user terminal navigation: 0 enabled 1 disabled 2 ON/OFF dis. 3 ON/OFF and Setpoint dis.	0	0	3	-
	/t1	Display on user terminal: 0 Not Config. 3 S3 Value 6 S6 Value 10 Virtual Probe 1 S1 Value 4 S4 Value 7 S7 Value 15 Actual Temp. 2 S2 Value 5 S5 Value 9 Control Probe Set Point	9	0	15	-
	/P1	Configuration probe: S1, S2, S4: 0 PT1000 1 PTC 2 NTC 3 NTC-LT 4 NTC-HT	2	0	4	-
	/P2	Configuration probe: S3/DI1: 0, 1, 2, 3, 4 NTC 5 Dig. Input	5	0	5	-
dEF	d0	Type of defrost: 0 Heater by Temp. 2 Heater by Time 1 Hot Gas by Temp. 3 Hot Gas by Time 4 Heater by Time with Temp. Control	0	0	4	-
	dI	Defrost interval	8	0	240	hours
	dP1	Maximum defrost duration	45	1	240	min
	dt1	End defrost temperature read by Sd	4/39.2	-50/-58	50/122	°C/°F
	d4	Enabling of defrost at start up: 0=Disabled, 1=Enabled	0	0	1	-
	d8	High temperature alarm delay after defrost	1	1	240	hours
	dd	Dripping time after defrost (fans off)	2	0	15	min
HcP	rHP	reset HACCP history	0	0	1	-
CnF	Hb	Buzzer: 0=Disabled, 1=Enabled	1	0	1	-
	H0	Serial address	1	1	247	-
	GF1	Configuration up arrow: 0 Off 1 Light 2 Aux 3 Continous cycle	0	0	3	-
	GF2	Configuration down arrow: 0 Off 1 Light 2 Aux 3 Continous cycle	0	0	3	-

	Val.	Description	Def.	Min	Max	UoM
ALM	A1	Alarm thresholds (AL, AH) relative to the set point St or absolute: 0 = relative; 1 = absolute	0	0	1	-
	AH	Relative High temperature alarm threshold	0	0	555/999	Δ °C/°F
	AL	Relative Low temperature alarm threshold	0	0	200/360	Δ °C/°F
	AHA	Absolute High temperature alarm threshold	537/999	-100/-148	537/999	°C/°F
	ALA	Absolute Low temperature alarm threshold	-100/-148	-100/-148	537/999	°C/°F
	Ad	Delay time for high and low temperature alarms (AH, AL)	120	0	240	min
	Add	Door alarm delay and high temp. alarm delay after door opening	5	1	240	min
cMP	c0	Compressor, fan and AUX start delay at power on	0	0	15	min
	c1	Minimum time between compressor consecutive starts	0	0	15	min
	c2	Minimum compressor OFF time	3	0	15	min
	c3	Minimum compressor ON time	0	0	15	min
FAn	F0	Evaporator fan management: 0 Always On 1 Sd-Sv 2 Sd 3 Sv	0	0	3	-
	F1	Fan activation temperature	5/41	-50/-58	50/122	°C/°F
	F2	Fan with compressor off: 0 See F0 1 Off 2 Cycles to avoid stratification 3 Dehumidification cycles	1	0	3	-
	F3	Evaporators fan during defrost: 0=On, 1=Off	1	0	1	-
	Fd	Post dripping time after dripping (fans off with control active)	2	0	15	min
	Fpd	Evaporators fans during post-dripping: 0=On, 1=Off	0	0	1	-

ALARMS

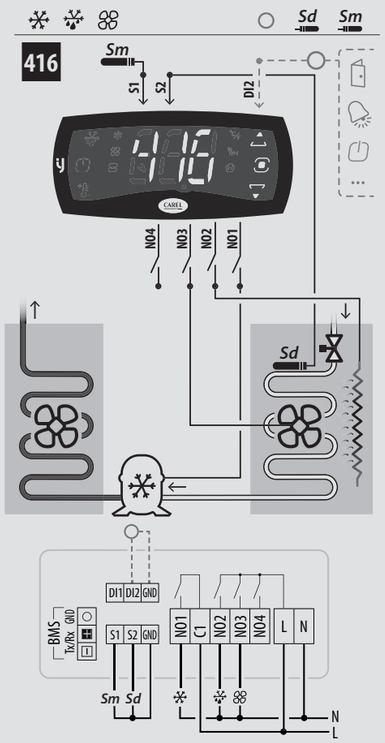
Code	Description
AFr	Frost protection
AtS	Restart in pump down
CE	Configuration writing error
CHt	High condensing temperature alarm
cht	High condensing temperature warning
dA	Delayed alarm from external contact
dor	Door open
E1	Probe 1 faulty or disconnected
E2	Probe 2 faulty or disconnected
E3	Probe 3 faulty or disconnected
E4	Probe 4 faulty or disconnected
E5	Probe 5 faulty or disconnected
E6	Probe S1H faulty or disconnected
E7	Probe S2H faulty or disconnected
Ed1	Defrost terminated after maximum time
Ed2	Defrost on second evaporator terminated after max. time
EHI	High power supply voltage alarm

Code	Description
ELO	Low power supply voltage alarm
Etc	Clock error
GHI	Generic alarm high threshold
GLO	Generic alarm low threshold
HA	Type HA HACCP alarm (high temp. during operation)
HF	Type HF HACCP alarm (high temp. after blackout)
HI	High temperature
IA	Immediate alarm from external contact
LO	Low temperature
IOC	I/O configuration error
LP	Low pressure
MAn	Output status overridden in manual mode
Pd	Maximum pump down time
rE	Control probe faulty or disconnected
rSF	Refrigerant leak alarm
SrC	Maintenance request
SF	Configuration not completed correctly

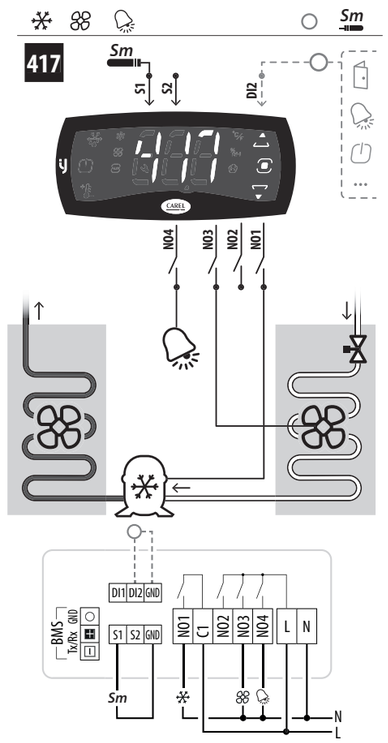
APPLICATION WIRING

Controller default configuration

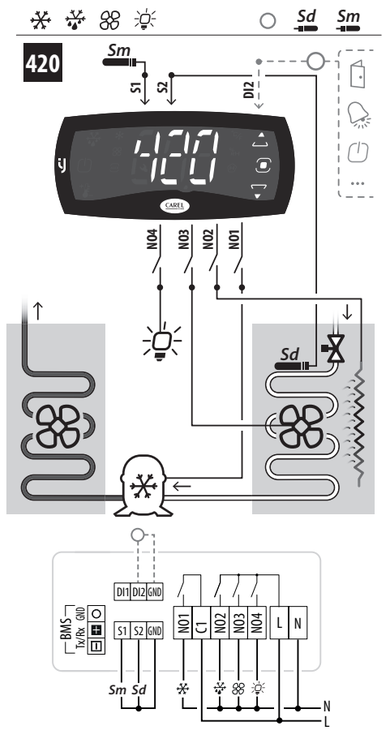
416 - Compressor - Defrost - Fan



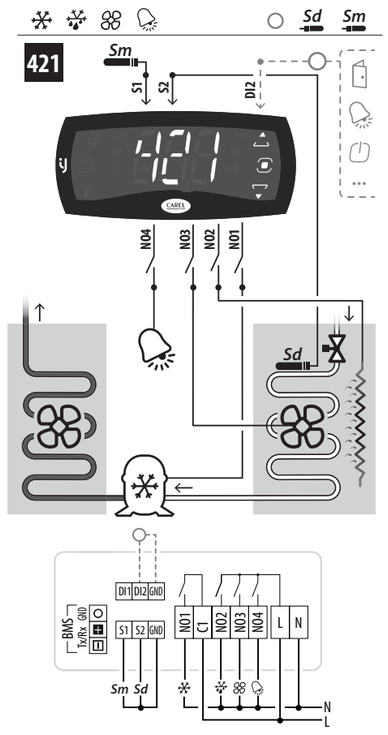
417 - Compressor - Fan - Alarm



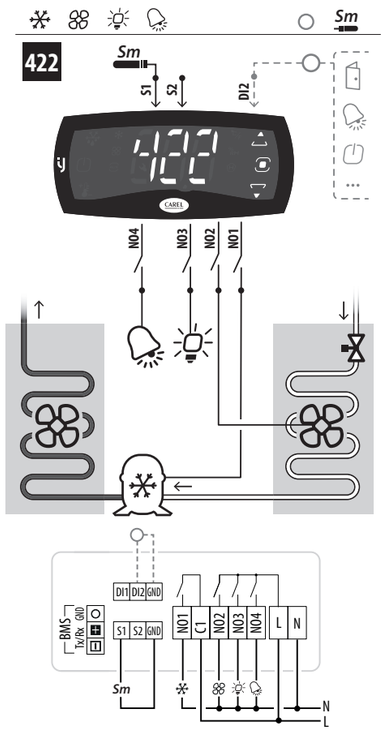
420 - Compressor - Defrost - Fan - Light



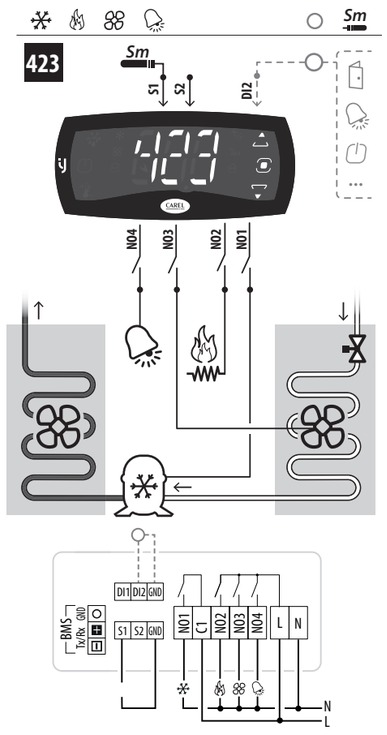
421 - Compressor - Defrost - Fan - Alarm



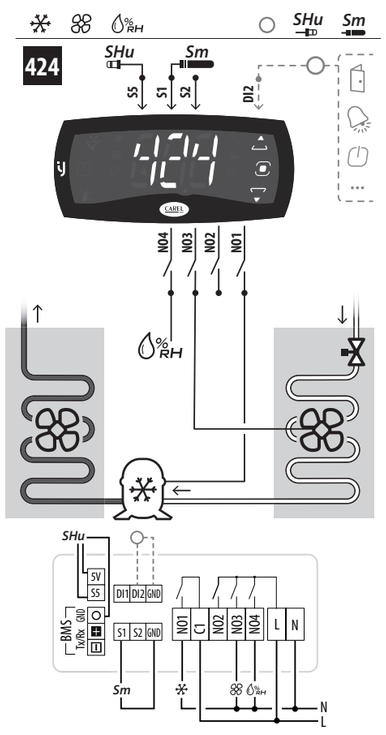
422 - Compressor - Fan - Light - Alarm



423 - Compressor - Resistor - Fan - Alarm



424 - Compressor - Fan - Humidifier



CAREL

CAREL INDUSTRIES SpA - Via dell'Industria, 11 – -35020 Brugine – Padova (Italy)
Tel. (+39) 0499716611 – Fax (+39) 0499716600 – e-mail: carel@carel.com – **www.carel.com**

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