Specifications

Setpoint Range: -40° to 220°F (-40° to 104°C)
Differential Range: 1° to 30°F (1° to 30°C)
Supply Voltage: 24/120/208/240 VAC, 60Hz
Sensor: Negative Temperature Coefficient with 7.5-Ft. Leads
(Maximum length for remote temperature sensing – 400 feet)
Control Enclosure Ambient Temperatures
Operating: -29° to 140°F (-34° to 60°C)
Storage: -40° to 185°F (-40° to 85°C)
Control Material
Cover and Case: NEMA 1 high-impact plastic
Thermoplastic: Non-flammable UL94V0
Switch Action: SPDT
Ambient Humidity: 0 to 95% RH, non-condensing
Dimensions
6 3/4" L x 3" W x 2 9/16" D
16E09-101 Optional Accessories/Service Items
Immersion Well: F89-0286

Replacement 7.5-Ft. NTC Remote Sensor: F136-0114
Well Heat Transfer Compound: F145-0650

Load Relay Electrical Ratings
N.C. and Load Contacts (Maximum Load Current)

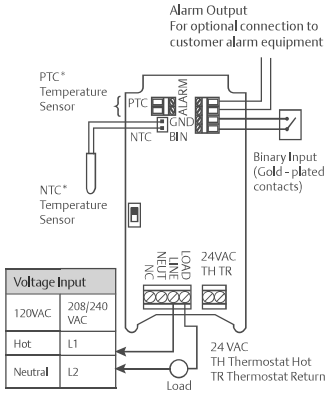
Applied Voltage	120VAC	208VAC	240VAC
Full load amps:	16 Amps	9.2 Amps	8 Amps
Locked rotor amps:	96 Amps	55.2 Amps	48 Amps
Non inductive lamps:	16 Amps	16 Amps	16 Amps
Horsepower:	1 Hp	1 Hp	1 Hp
24VAC:	100 VA, 30 VAC Max (Class 2)		
Pilot duty:	125 VA, 24 to 240 VAC		
Minimum load:	1 Amp @ 24 VAC		

Alarm Relay Electrical Readings

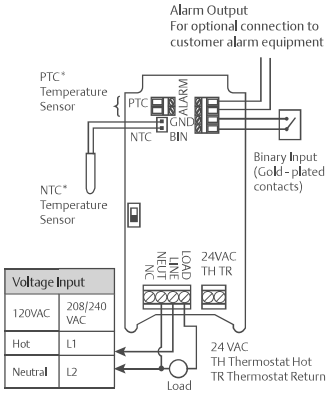
N.O. Contacts:	1 Amp (5 to 24 volts AC or DC)

Typical Wiring

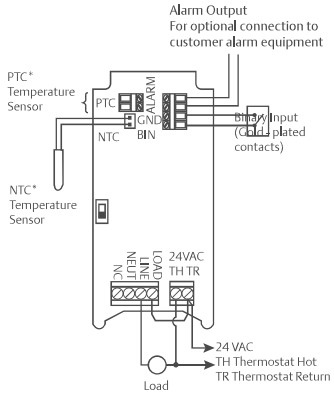
Line Voltage Application
(Power Stealing)



Line Voltage Application
(Non-Power Stealing)



Line Voltage Application
(Non-Power Stealing)



*Note: Alarm connection contacts close when sensor fails or temperature range is exceeded.
NTC - Negative Temperature Coefficient
PTC - Positive Temperature Coefficient
Note: Only one Sensor (PTC or NTC) may be connected. Sensor must meet specific temperature vs. resistance specifications.

16E09-101 * Replaces the Following Models								
Danfoss	T6054A1054	T675A1524	T678C1005	Ranco ETC Commercial	Johnson Controls	A319ABC-24-01	White Rodgers	1687-9†
UT72	T675A1045	T675A1540	T7079A1004	Temperature Controls	A19ABA-40C†	A320ABC-1C	1609-33†	201-8†
Honeywell	T675A1136	T675A1565	T7079A1012	060-100†	A19ABC-24C†	A419ABC-1C	1609-100†	201-20†
T4031A1073	T675A1425	T675A1706	T7079A1046	060-101†	A19BAB-3C†		1609-101†	230-22†
T4031C1004	T675A1441	T675A1722	T7079A1053	060-109†	A19BAC-1C†		1609-102†	241-2†
T4031C1012	T675A1458	T675A1771		060-200†	A19BAF-1C†		1609-103†	2A37-1†
T6031A1029	T675A1508	T675A1854		ETC-111000	A19BBC-2C†		1609-104†	
T6054A1005	T675A1516	T675F1032		ETC-112000	A319ABC-12-01		1609-105†	

*16E09-101 is not rated as a limit control †16E09-101 is a replacement on non-inductive applications up to 16 amps

Dixell Products Section



Dixell

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PRIME CX SERIES: NT, MT AND LT APPLICATIONS - SERIAL OUTPUT

- Innovative digital controllers dedicated to heat and M.T. – L.T. refrigeration
- Easy and intuitive programming mode
- Display with icons and integrated measurement units
- On/off key
- Plastic front frame with “cut out” “WING” compatible
- Up to 2 light switches
- Energy saving cycles through digital input
- Fast freezing with dedicated set point
- Regulation stop through auxiliary probe
- Regulation restart with door open alarm
- Temperature or HACCP Max and Min functions
- Configurable digital input also as probe
- Virtual probe management
- Condenser temperature management to prevent critical plant situations
- Hot Key connector for a quick and easy programming
- Serial line connection to monitoring systems
- Connection for X-REP remote display (alternative to TTL output)
- 3VA max power absorption
- Display with red LED (10,5mm high) and icons

HOW TO ORDER

PRIME CX [X][R][ ][ ][C][X][-][A][B][C][D][E] -17.8 For blue display please contact Dixell

A	B	C				D			E		
Power supply	Inputs		Buzzer	X-REP (excludes TTL output)	RS485 output (only for XR35/75CX)		Measurement unit	RTC		Compressor output	Connections
0 = 12Vac/dc	**P** = PTC	**0**	No	No	No	**C**	°C	No	**0**	8A	Screw
1 = 24Vac/dc	**N** = NTC	**1**	Yes	No	No	**F**	°F	No	**1**	20A	Screw
2 = 24Vac	**S** = Pt1000 only for XR35/75CX	**2**	No	Yes	No	**H**	°C Heating only for XR10CX	No	**3**	16A	Screw
3 = 9÷40Vdc		**3**	Yes	Yes	No	**L**		No	**6**	8A	Faston
4 = 110Vac		**4**	No	No	Yes	**I**	°F Heating only for XR10CX	Yes	**7**	20A	Faston
5 = 230Vac		**5**	Yes	No	Yes	**M**	°C	Yes	**8**	16A	Faston
		6	No	Yes	Yes		°F				
		7	Yes	Yes	Yes						

PRIME CX

THERMOSTAT and CONTROLLERS with "OFF CYCLE" DEFROST for NORMAL, MEDIUM and LOW TEMPERATURE



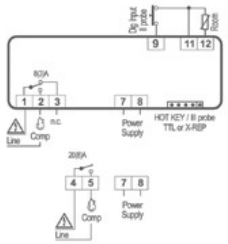
CX: 32x74mm

XR10CX	Digital thermostat with heating or cooling action
XR20CX	Digital controller for N.T. with "off cycle" defrost
XR30CX	Digital controller for N.T. with "off cycle" defrost and additional configurable relay
XR35CX	Digital controller for N.T. with "off cycle" defrost, additional configurable relay and RS485
XR36CX	2 set point digital controller for N.T. with "off cycle" defrost

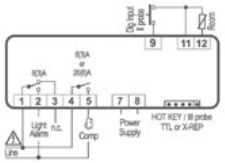
FEATURES	XR10CX	XR20CX	XR30CX	XR35CX	XR36CX
Display: n° digits	± 3 d.p.	± 3 d.p.	± 3 d.p.	± 3 d.p.	± 3 d.p.
Power supply	12, 24Vac/dc 24, 110, 230Vac 9÷40Vdc *	12, 24Vac/dc 24, 110, 230Vac 9÷40Vdc *	12, 24Vac/dc 24, 110, 230Vac 9÷40Vdc *	24, 110, 230Vac	12, 24Vac/dc 24, 110, 230Vac 9÷40Vdc *
Probe inputs					
Thermostat	NTC/PTC	NTC/PTC	NTC/PTC	PTC/Pt1000	NTC/PTC
Thermostat 2					NTC/PTC
Defrost				PTC/Pt1000	
Defrost 2					
Condenser	NTC/PTC on HOT KEY	NTC/PTC on HOT KEY	NTC/PTC on HOT KEY	PTC/Pt1000	NTC/PTC on HOT KEY
Digital inputs					
Alarm, start defrost, AUX, door switch, pressure switch, probe	config	config	config	config	config
Alarm, start defrost, AUX, door switch, pressure switch				config	
Relay outputs					
Compressor	8A, 20A opt	8A, 20A opt	8A, 20A opt	8A, 16A opt	8A, 20A opt
Compressor 2					
Thermostat 2					8A
Defrost					
Defrost 2					
Fans					
Light or alarm			8A	8A	
Anti-sweat					
Other					
Hot Key/Prog Tool Kit output	pres	pres	pres	pres	pres
Remote display output	X-REP opt	X-REP opt	X-REP opt	X-REP opt	X-REP opt
Serial output	TTL	TTL	TTL	TTL/RS485 opt	TTL
Buzzer	opt	opt	opt	opt	opt
Real time clock			opt	opt	

*: only for models with compressor = 8A

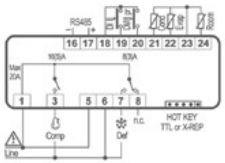
XR10CX
XR20CX



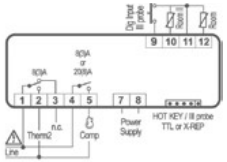
XR30CX



XR35CX



XR36CX



PRIME CX

CONTROLLERS for NORMAL, MEDIUM and LOW TEMPERATURE



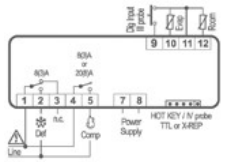
CX: 32x74mm

XR40CX	Digital controller for M.T. and L.T. with electrical or hot gas defrost
XR50CX	Digital controller for M.T. and L.T. with electrical or hot gas defrost and auxiliary relay
XR56CX	2 set point digital controller for M.T. and L.T. with electrical or hot gas defrost and auxiliary relay

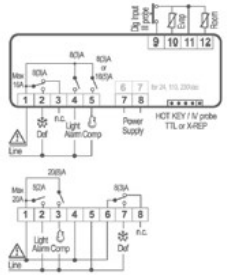
FEATURES	XR40CX	XR50CX		XR56CX	
Display: n° digits	± 3 d.p.	± 3 d.p.	± 3 d.p.	± 3 d.p.	± 3 d.p.
Power supply	12, 24Vac/dc 24, 110, 230Vac 9÷40Vdc *	12, 24Vac/dc 24, 110, 230Vac 9÷40Vdc *	24, 110, 230Vac	12, 24Vac/dc 24, 110, 230Vac 9÷40Vdc *	24, 110, 230Vac
Probe inputs					
Thermostat	NTC/PTC	NTC/PTC	NTC/PTC	NTC/PTC	NTC/PTC
Thermostat 2				NTC/PTC	NTC/PTC
Defrost	NTC/PTC	NTC/PTC	NTC/PTC		
Defrost 2					
Condenser	NTC/PTC on HOT KEY	NTC/PTC on HOT KEY	NTC/PTC on HOT KEY	NTC/PTC on HOT KEY	NTC/PTC on HOT KEY
Digital inputs					
Alarm, start defrost, AUX, door switch, pressure switch, probe	config	config	config	config	config
Alarm, start defrost, AUX, door switch, pressure switch					
Relay outputs					
Compressor	8A, 20A opt	8A, 16A opt	20A	8A, 16A opt	20A
Compressor 2					
Thermostat 2				8A	8A
Defrost	8A	8A	8A		
Defrost 2					
Fans					
Light or alarm		8A	5A	8A	5A
Anti-sweat					
Other					
Hot Key/Prog Tool Kit output	pres	pres	pres	pres	pres
Remote display output	X-REP opt	X-REP opt	X-REP opt	X-REP opt	X-REP opt
Serial output	TTL	TTL	TTL	TTL	TTL
Buzzer	opt	opt	opt	opt	opt
Real time clock					

*: only for models with compressor = 8A

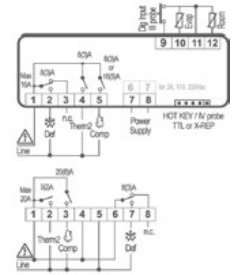
XR40CX



XR50CX



XR56CX



PRIME CX

CONTROLLERS for MEDIUM and LOW TEMPERATURE



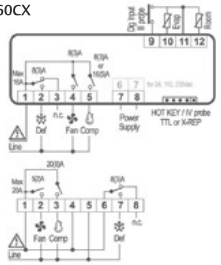
CX: 32x74mm

XR60CX	Digital controller for M.T. and L.T. ventilated applications with dual humidity function
XR64CX	Digital controller for M.T. and L.T. ventilated applications with dual evaporator
XR70CX	Digital controller for M.T. and L.T. ventilated applications with auxiliary relay and dual humidity function

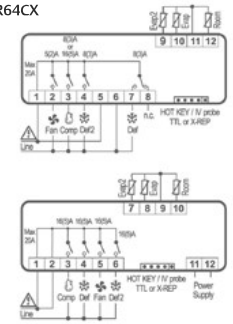
FEATURES	XR60CX		XR64CX		XR70CX	
Display: n° digits	± 3 d.p.	± 3 d.p.	± 3 d.p.	± 3 d.p.	± 3 d.p.	± 3 d.p.
Power supply	12, 24Vac/dc 24, 110, 230Vac 9÷40Vdc *	24, 110, 230Vac	24, 110, 230Vac	12Vac/dc	24, 110, 230Vac	12Vac/dc
Probe inputs						
Thermostat	NTC/PTC	NTC/PTC	NTC/PTC	NTC/PTC	NTC/PTC	NTC/PTC
Thermostat 2						
Defrost	NTC/PTC	NTC/PTC	NTC/PTC	NTC/PTC	NTC/PTC	NTC/PTC
Defrost 2			NTC/PTC	NTC/PTC		
Condenser	NTC/PTC on HOT KEY	NTC/PTC on HOT KEY	NTC/PTC on HOT KEY	NTC/PTC on HOT KEY	NTC/PTC on HOT KEY	NTC/PTC on HOT KEY
Digital inputs						
Alarm, start defrost, AUX, door switch, pressure switch, probe	config	config	config	config	config	config
Alarm, start defrost, AUX, door switch, pressure switch						
Relay outputs						
Compressor	8A, 16A opt	20A	8A, 16A opt	16A	8A, 16A opt	16A
Compressor 2						
Thermostat 2						
Defrost	8A	8A	8A	16A	8A	16A
Defrost 2			8A	16A		
Fans	8A	5A	5A	16A	5A	16A
Light or alarm					8A	16A
Anti-sweat						
Other						
Hot Key/Prog Tool Kit output	pres	pres	pres	pres	pres	pres
Remote display output	X-REP opt	X-REP opt	X-REP opt	X-REP opt	X-REP opt	X-REP opt
Serial output	TTL	TTL	TTL	TTL	TTL	TTL
Buzzer	opt	opt	opt	opt	opt	opt
Real time clock					opt	opt

*: only for models with compressor = 8A

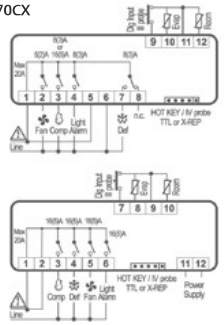
XR60CX



XR64CX



XR70CX



PRIME CX

CONTROLLERS for MEDIUM and LOW TEMPERATURE

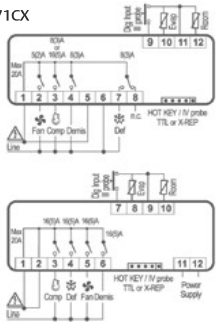


CX: 32x74mm

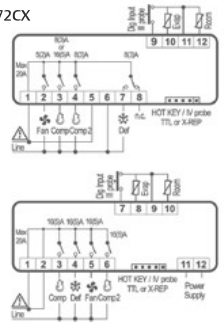
XR71CX	Digital controller for M.T. and L.T. ventilated applications with anti-sweat heaters management
XR72CX	Digital controller for M.T. and L.T. ventilated applications with dual compressor management
XR75CX	Digital controller for M.T. and L.T. ventilated applications with auxiliary relay, dual humidity function and RS485

FEATURES	XR71CX		XR72CX		XR75CX
Display: n° digits	± 3 d.p.	± 3 d.p.	± 3 d.p.	± 3 d.p.	± 3 d.p.
Power supply	24, 110, 230Vac	12Vac/dc	24, 110, 230Vac	12Vac/dc	24, 110, 230Vac
Probe inputs					
Thermostat	NTC/PTC	NTC/PTC	NTC/PTC	NTC/PTC	PTC/Pt1000
Thermostat 2					
Defrost	NTC/PTC	NTC/PTC	NTC/PTC	NTC/PTC	PTC/Pt1000
Defrost 2					
Condenser	NTC/PTC on HOT KEY	NTC/PTC on HOT KEY	NTC/PTC on HOT KEY	NTC/PTC on HOT KEY	PTC/Pt1000
Digital inputs					
Alarm, start defrost, AUX, door switch, pressure switch, probe	config	config	config	config	config
Alarm, start defrost, AUX, door switch, pressure switch					config
Relay outputs					
Compressor	8A, 16A opt	16A	8A, 16A opt	16A	8A, 16A opt
Compressor 2			8A	16A	
Thermostat 2					
Defrost	8A	16A	8A	16A	8A
Defrost 2					
Fans	5A	16A	5A	16A	5A
Light or alarm					8A
Anti-sweat	8A	16A			
Other					
Hot Key/Prog Tool Kit output	pres	pres	pres	pres	pres
Remote display output	X-REP opt	X-REP opt	X-REP opt	X-REP opt	X-REP opt
Serial output	TTL	TTL	TTL	TTL	TTL/RS485 opt
Buzzer	opt	opt	opt	opt	opt
Real time clock					opt

XR71CX



XR72CX



XR75CX

