

ETC Commercial Temperature Control

Microprocessor-based family of temperature controls designed to provide on/off control for heating, air conditioning and refrigeration applications.

Wide temperature range –
30° to 220°F

One and two stage capability

Part #	Description
ETC111000	1 stage – 120/208/240
ETC112000	1 stage – 24 VAC
ETC211000	2 stage – 120/208/240
ETC212000	2 stage – 24VAC



Ranco Wide Range Control

Recognizing the need for flexibility in design of refrigeration equipment, these controls offer a wide selection for such products as self-contained refrigerators, freezers, coolers, walk-in units, and refrigeration display cases.

SPDT – opens low

Part #	Range
020-7041	0 to 100 Differential (°F)6 to 20 Capillary Length96" w/ 3/8 x 6" cross ambient bulb
016-111	0 to 55 Differential (°F)3 to 20 Capillary Length72"



Ranco O Series Custom and Wide range controls

Wide selection of controls for such products as self-contained refrigerators, coolers, walk ins and refrigerator display cases.

SPST opens low

Part #	Range	Diff.	Cap.
010-1419	-35 to 15	3 to 20	72"
010-1408	-15 to 40	3 to 20	72" bulb
010-1416	0 to 55	3 to 20	72"
010-1418	0 to 55	3 to 20	Air Coil
010-1409	0 to 55	3 to 20	72"bulb

SPDT

Part #	Range	Diff.	Cap.
060-100	-35 to 95	4 to 50	96" w/bulb



Ranco A30 Series – Constant cut-in Controls

Direct replacement constant differential or constant cut-in controls.

Used on vending machines,
beverage coolers, water coolers.

Switch; SPST 48" Cap Tube

Part #	Diff.	Warm		Cold	
		Off	On	On	Off
A30-2209	8	36.5	44.5	46	35
A30-2210	8	32	40	42	30
A30-2211	10	0	10	17.5	-10.5



Constant cut-in Controls

Reach – in / Medium Temperature

One on one replacements for vending machines, automatic
beverage dispensers, and reach in coolers.

Part #	Range °F	Cut-in ° F	Cap.
A12-1506	9 to 22	38	39
A12-1560	19 to 29	38	72
A12-700	11.5 to 26	37	84
A12-701	15 to 31	41	84



Adaptable Replacement

Constant Differential Controls

Compact controls readily adapt to
nearly all commercial refrigerators
and freezers.

Part #	Range ° F	Diff. ° F	Cap.
A22-391*	11 to 51	8	66
A22-392*	14 to 61.5	23.5	48
A30-180	-4 to 41	12	42
A30-260	-5 to 32	6	84
A30-261	32 to 61	6	84
A30-262	3 to 43	12	84
A30-301*	-24 to 20.5	8.5	84
A30-304*	-21 to 19.5	15.5	108
A30-308*	-30.5 to 12.5	11	84



* No Off position

Johnson Universal Replacements

Universal wide-range remote bulb control with adjustable differential. 8' capillary with 3/8 x 4" bulb.

Range: -30 to 100

Diff: 3 to 12

SPDT

Part #

A19ABC-24C

A19ABA-40C – opens low

Wide temperature range with air coil sensing element.

1 3/8 x 2 1/4 coiled element.

Part #

A19BBC-2 Range: 30 to 100



A19ABC-24



White Rodgers Universal Replacements –

Wide range temperature control for refrigeration applications.

Remote bulb 3/8 X 5 1/4".

Close on rise.

Range: 30° to 50°F. Diff: 3.5 to 40

Part #

Description

1609-101 5' cap tube

1609-103 10' cap

1609-104 20' cap tube

Similar to above, but range of -20 to 50°F Diff: 3 to 25

1609-90

8' cap tube



1609-101

Johnson Electronic Lube Oil Control

Lube oil delay 120 Seconds

Fits Copeland Compressors

Part # P545NBC-22C



Johnson Lube Oil Pressure

Control w/time delay

This control measures net oil pressure available to circulate oil through the lubrication system.

Application: Semi-Hermetic Compressors

Universal mount, trip free manual reset, ambient compensated time delay .

Time delay 120 seconds, manual reset, factory set 9 psig, heater circuit 120/240.

Part #

Connection

P45NCA-12C 3/8" cap./w 1/4" fl.nut

P145NCA-12C 1/4 male flare



P145NCA

Ranco Single Function Low Pressure Controls

Close on rise switch action for conventional low pressure cycling, pump down, limit, defrost termination.

Type 010 SPST for single phase

Type 020 DPST for double break or 3 phase applications.



Part #	Range (psi)	Differential (psi)	Switch	Connection	Cap.Lgth.
010-1402	12" to 50	5 to 35	SPST Open low	1/4 M Flare	-
010-1483	12" to 50	10 to 40	SPST Open Low	1/4 F	36"
010-2054*	100-400	40 to 150	SPST Open Low	1/4 F	36"
020-7006	100-400	40 to 150	DPDT Open Low	1/4F	36"

*Can be used as a fan cycling control

Type 016 switch action can be used for multiple applications. The unused terminal may be wired to an alarm.

Part #	Range (psi)	Differential (psi)	Switch	Connection	Cap.Lgth.
016-107	10" to 100	10 to 40	SPDT	1/4 M Flare	-
016-108	100 to 400	40 to 150	SPDT	1/4 F	36"
016-200	150 to 450	Manual Reset	SPDT/Locks on decrease	1/4 F	48"
016-527	10" to 100	10 to 40	SPDT	1/4F	36"
016-557	12" to 50	5 to 35	SPDT	1/4 M Flare	-

Ranco Dual Pressure Controls

These controls offer a wide variety of ranges and options for refrigerants. Universal mounting and compact design.



SPST Part #	Low Side		High Side		Reset		Capillary Conn. (in.)	Conn.
	Range (psi)	Diff. (psi)	Range (psi)	Diff. (psi)	Low	High		
012-1502	12" to 50	5 to 35	150 to 450	70 Fixed	Auto	Auto	1/4 F	36"
012-1506	12" to 50	5 to 35	100 to 250	50 Fixed	Auto	Auto	1/4 F	36"
012-1549	10" to 100	10 to 40	150 to 450	70 Fixed	Auto	Auto	1/4 F	36"
012-1594	10" to 100	Manual	150 to 450	70 Fixed	Manual	Manual	1/4 F	36"
DPDT								
022-7706	10" to 100	10 to 40	150 to 450	70 Fixed	Auto	Conv.	1/4 F	36"

Ranco Refrigerant Hoses

Fittings 1/4 SAE - straight

Part #	Hose Length
1290132-A18	18"
1290132-A24	24"
1290132-A36	36"
1290132-A48	48"



Johnson Low Pressure Controls

Used primarily for low pressure cut-out control, pump down control, and capacity control on commercial refrigeration and air conditioning systems.

Range psig: 20" Hg. to 100 (-68 to 690)

Diff. psi – minimum 7, maximum 50

Working pressure 100 psig

Switch: opens low

Part #	Connection
P70AB-2	36" cap w/1/4" fl.nut
P170AB-2	1/4" male flare



Johnson High Pressure Controls

“Fan Cycling”

“Sight set” calibrated pressure adjustment displays visible pressure control, fully adjustable through the range without moving cover. Manual reset lockout option provides “trip free” lockout that cannot be overridden or reset until pressure returns to a specified level.

Range: 100 to 400

Diff: 35 to 100 psi

Switch: SPST – opens low

Part #	Connection
P70AA118	36" cap w/1/4" fl. nut
P170AA118	1/4" male flare



Johnson Dual Pressure Controls

The P70 series of dual pressure controls employs a SPST switch, that is opened when either high pressure or low pressure beyond the control settings is sensed at the control's two bellows sensing elements.

Auto reset L.P. Range: 20" to 100 Diff. psi 7 to 50

Part #	Connection
P70LB1	36" cap w/1/4" fl.nut
P170LB1	1/4 male flare

Auto Reset L.P. Range 12" to 80 Diff: psi 5 to 35

P70LB6	36" cap w/1/4" fl. nut
P170LB6	1/4 male flare



P170LB

Ranco Defrost termination/fan delay control

This control terminates defrost and delays the evaporator fan operation on electric heat, hot gas and reverse cycle commercial refrigeration systems.
Switch: SPDT Range: 40-75°F

Part #

F25-107 3/8" x 4" bulb / 60" Cap



Ranco Ice Bank Control

Suitable for soft drink dispensers, drink vending machines, and ice builders for thermal storage. Differential: Approx. 1/8" ice thickness.
SPST/opens low - 76" cap tube

Part #

018-100 Range – fixed

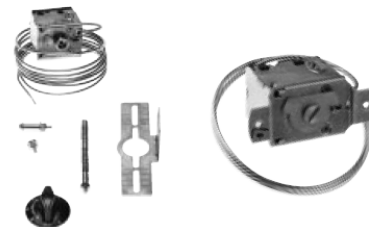


Bin Level Control

Adaptable replacement for ice machine applications.
Range 35 to 51. Diff: 6°
SPDT – 48" cap tube

Part #

A22-1129



Water Cooler Control

Replace about 80% of your control needs for equipment such as Ebco, Elkay, Sunroc, Halsey-Taylor.
Normal on 53°, normal off 46°F
Cold: 37°, Warm 61°F
Diff. 7°F
Cap. 48"

Part #

K3001



Single Stage Control

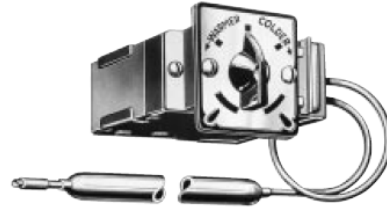
This control replaces many OEM controls on single Stage packaged terminal, room and thru-the-wall heat cool units.

Switch: SPDT

Range: 60 to 98°/Diff: 3°F

Part #

C12-5010



Two Stage Heating/Cooling Control

This control replaces many OEM controls on 2 stage cooling and heat/cool units.

The two SPDT switches are staged 3.5°F.

Temp. Range: 71 to 101° Clg.
64 to 96° Htg.

Bulb: 3/8" x 9" w/36" cap.

Part #

C17-100



Adaptable Room Air Conditioner Controls

Adaptable control to replace OEM controls which govern the off/on compressor function.

SPST/ Range: 58 to 86/ Differential 5°F

Part #	Sensing Element
A30-X450	Air Coil
A30-X451	36" Straight Cap Tube
A30-X452	Cross ambient bulb 3/8" x 4"



Mini Pressure Switches

Used on refrigeration, air conditioning and heat pumps.
1/4 Female Flare Connection

Part #	Open PSI	Close PSI
Low Pressure		
SLP 0520	5	20
SLP 2550	25	50
SLP 4080	40	80

High Pressure

SHP200150	200	150
SHP400300	400	300
SHP450250	450	250
SHP610420	610	420

High Pressure – Manual Reset

SMR375	375
SMR410	410
SMR440	440

Fan Cycling

SFC75120	75	120
SFC110170	110	170
SFC150225	150	225
SFC200240	200	240
SFC200365	200	365
SFC210275	210	275
SFC300400	300	340



Freeze Protection Control

Protects air conditioning evaporator coil from freezing.

Opens 35°F/Close 50°F

Part #
SFPC

