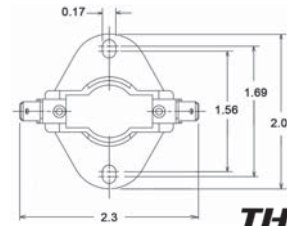


# TEMPERATURE LIMIT CONTROL SWITCHES

## LIMIT CONTROL SWITCHES – AUTO RESET



**Limit Control Switches – Auto Reset  
(Large Flanged Airstream – 64T Two Pole)**

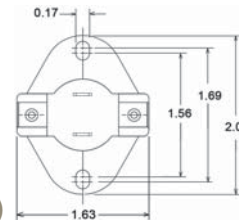


**THERMODISC**

PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	CLOSE TEMP (°F)	TOLERANCE CLOSE TEMP (°F)	NOM TEMP DIFFERENCE	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT	MOUNTING INSERTION DEPTH-MAX (IN)
47-20045-06	64T	130	+/-5	90	+/-10	40	230	25	Red	Enclosed	DPST	Normally Closed	3/8
47-20045-02	64T	150	+/-5	110	+/-10	40	230	25	Red	Enclosed	DPST	Normally Closed	3/8
47-25261-14	64T	160	+/-5	130	+/-9	30	230	25	—	Enclosed	DPST	Normally Closed	3/8
47-25261-15	64T	170	+/-5	130	+/-9	40	230	25	—	Enclosed	DPST	Normally Closed	3/8
47-20045-03	64T	170	+/-5	130	+/-10	40	230	25	Red	Enclosed	DPST	Normally Closed	3/8
47-25261-13	64T	170	+/-5	140	+/-9	30	230	25	—	Enclosed	DPST	Normally Closed	3/8
42-25261-46	64T	180	+/-5	140	+/-9	40	230	25	—	Exposed	DPST	Normally Closed	3/8
47-25261-47	64T	190	+/-5	160	+/-9	30	230	25	—	Enclosed	DPST	Normally Closed	3/8



**Limit Control Switches – Auto Reset  
(Large Flanged Airstream – 69T Heat Assisted)**

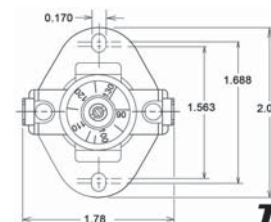


**THERMODISC**

PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	CLOSE TEMP (°F)	TOLERANCE CLOSE TEMP (°F)	NOM TEMP DIFFERENCE	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT	HEATER WATTAGE	MOUNTING INSERTION DEPTH-MAX (IN)
47-22860-05	69T	100	+10/-0	90	+10/-0	10	230	25	Yellow	Exposed	SPST	Normally Closed	2	3/8
47-22860-01	69T	105	+10/-0	95	+10/-0	10	230	25	Red	Exposed	SPST	Normally Closed	1.5	3/8
47-22860-03	69T	105	+10/-0	95	+10/-0	10	230	25	Green	Exposed	SPST	Normally Closed	2	3/8
47-22860-06	69T	110	+10/-0	100	+10/-0	10	230	25	Purple	Exposed	SPST	Normally Closed	1	3/8
47-24261-01	69T	110	+10/-0	100	+10/-0	10	230	25	—	Exposed	SPST	Normally Closed	1.3/1.5	3/8
47-22860-02	69T	110	+10/-0	100	+10/-0	10	230	25	Blue	Exposed	SPST	Normally Closed	1.5	3/8
47-22860-04	69T	110	+10/-0	100	+10/-0	10	230	25	Orange	Exposed	SPST	Normally Closed	2	3/8



**Limit Control Switches – Auto Reset  
(Large Flanged Airstream – 74T Adjustable)**



**THERMODISC**

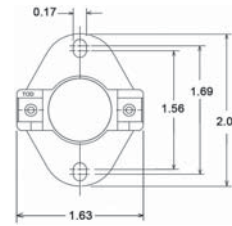
PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	CLOSE TEMP (°F)	NOM TEMP DIFFERENCE	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	DISC FACE	SWITCH TYPE	CONTACT ORIENT	MOUNTING INSERTION DEPTH-MAX (IN)
47-25114-01	74T	Close Temperature Setting minus 20	90–130 (110 Factory Setting)	20	230	25	Enclosed	SPST	Normally Open	3/8
47-25114-02	74T	Close Temperature Setting minus 20	140–180 (160 Factory Setting)	20	230	25	Enclosed	SPST	Normally Open	3/8
47-25115-01	74T	135–175 (155 Factory Setting)	Open Temperature Setting minus 20	20	230	25	Enclosed	SPST	Normally Closed	3/8
47-25115-02	74T	135–175 (155 Factory Setting)	Open Temperature Setting minus 40	40	230	25	Enclosed	SPST	Normally Closed	3/8
47-25115-03	74T	175–215 (195 Factory Setting)	Open Temperature Setting minus 40	40	230	25	Enclosed	SPST	Normally Closed	3/8
47-25115-04	74T	210 - 250 (230 Factory Setting)	Open Temperature Setting minus 40	40	230	25	Enclosed	SPST	Normally Closed	3/8
47-25115-05	74T	250–290 (270 Factory Setting)	Open Temperature Setting minus 40	40	230	25	Enclosed	SPST	Normally Closed	3/8

# TEMPERATURE LIMIT CONTROL SWITCHES

## LIMIT CONTROL SWITCHES – AUTO RESET



**Limit Control Switches – Auto Reset  
(Large Flanged Airstream – 60T)**



**THERMODISC**

PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	CLOSE TEMP (°F)	TOLERANCE CLOSE TEMP (°F)	NOM TEMP DIFFERENCE	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT	MOUNTING INSERTION DEPTH-MAX (IN)
47-41569-01	60T	55	+/-5	65	+/-5	10	230	25	—	Enclosed	SPST	Normally Open	3/8
47-42244-01	60T	60	+/-6	70	+/-6	10	230	25	—	Enclosed	SPST	Normally Open	3/8
47-17359-23	60T	80	+/-3	70	+/-5	10	230	25	Green	Enclosed	SPST	Normally Closed	3/8
47-19554-34	60T	90	+/-3	80	+/-5	10	230	25	Red	Enclosed	SPST	Normally Closed	3/8
47-17359-21	60T	95	+/-3	85	+/-5	10	230	25	Green	Enclosed	SPST	Normally Closed	3/8
47-19554-37	60T	100	+/-5	125	+/-5	25	230	25	Green	Enclosed	SPST	Normally Open	3/8
47-21663-10	60T	110	+/-5	90	+/-5	20	230	25	Green	Exposed	SPST	Normally Closed	3/8
47-19554-40	60T	110	+/-5	100	+/-5	10	230	25	White	Enclosed	SPST	Normally Closed	3/8
47-21663-13	60T	110	+/-5	100	+/-5	10	230	25	Green	Exposed	SPST	Normally Closed	3/8
47-19554-83	60T	110	+/-5	125	+/-5	15	230	25	Green	Enclosed	SPST	Normally Open	3/8
47-104465-01	60T	115	+/-5	95	+/-5	20	230	25	Yellow	Enclosed	SPST	Normally Closed	25/32
47-25116-03	60T	115	+/-5	130	+/-5	15	230	25	—	Enclosed	SPST	Normally Open	3/8
47-19554-39	60T	120	+/-5	100	+/-5	20	230	25	White	Enclosed	SPST	Normally Closed	3/8
47-103895-02	60T	120	+/-5	100	+/-5	20	230	25	Tan	Enclosed	SPST	Normally Closed	3/8
47-104465-02	60T	120	+/-5	100	+/-5	20	230	25	Red	Enclosed	SPST	Normally Closed	25/32
47-21663-15	60T	120	+/-5	110	+/-5	10	230	25	Green	Exposed	SPST	Normally Closed	3/8
47-21663-16	60T	125	+/-5	115	+/-5	10	230	25	Green	Exposed	SPST	Normally Closed	3/8
47-104465-03	60T	125	+/-5	115	+/-5	10	230	25	Blue	Enclosed	SPST	Normally Closed	25/32
47-21663-07	60T	130	+/-5	100	+/-5	30	230	25	Green	Exposed	SPST	Normally Closed	3/8
47-21077-02	60T	130	+/-5	100	+/-6	30	230	25	Red	Enclosed	SPST	Normally Closed	25/32
PD476609	60T	130	+/-5	110	+/-5	20	230	25	—	Enclosed	SPST	Normally Closed	3/8
PD425123	60T	135	+/-5	90	+/-7	45	230	25	—	Exposed	SPST	Normally Closed	3/8
47-19554-85	60T	140	+/-5	100	+/-10	40	230	25	Red	Enclosed	SPST	Normally Closed	3/8
47-25117-01	60T	140	+/-5	100	+/-7	40	230	25	—	Enclosed	SPST	Normally Closed	3/8
47-25266-11	60T	140	+/-5	110	+/-9	30	230	25	—	Enclosed	SPST	Normally Closed	3/8
47-21663-04	60T	140	+/-5	110	+/-6	30	230	25	Green	Exposed	SPST	Normally Closed	3/8
47-25119-01	60T	140	+/-5	120	+/-5	20	230	25	—	Enclosed	SPDT	Normally Open/ Closed	3/8
47-23610-09	60T	140	+/-5	120	+/-5	20	230	25	Tan	Enclosed	SPST	Normally Closed	25/32
47-21663-01	60T	140	+/-5	130	+/-5	10	230	25	Green	Exposed	SPST	Normally Closed	3/8
47-17359-13	60T	140	+/-5	130	+/-5	10	230	25	Green	Enclosed	SPST	Normally Closed	3/8
470039	60T	145	+/-5	115	+/-6	30	230	25	—	Exposed	SPST	Normally Closed	3/8
470029	60T	150	+/-5	105	+/-7	45	230	25	—	Exposed	SPST	Normally Closed	3/8
PD476607	60T	150	+/-5	115	+/-6	35	230	25	—	Enclosed	SPST	Normally Closed	3/8
47-21663-09	60T	150	+/-5	120	+/-5	30	230	25	Green	Exposed	SPST	Normally Closed	3/8
47-25270-20	60T	155	+/-5	115	+/-7	40	230	25	—	Exposed	SPST	Normally Closed	3/8
470033	60T	160	+/-5	115	+/-7	45	230	25	—	Exposed	SPST	Normally Closed	3/8
47-19554-07	60T	160	+/-5	120	+/-8	40	230	25	Red	Enclosed	SPST	Normally Closed	3/8
47-19554-88	60T	160	+/-5	120	+/-8	40	230	25	Red	Enclosed	SPST	Normally Closed	3/8
47-25261-12	60T	160	+/-5	130	+/-9	30	230	25	—	Enclosed	SPST	Normally Closed	3/8
47-23610-17	60T	160	+/-5	140	+/-5	20	230	25	Blue/White	Enclosed	SPST	Normally Closed	25/32
47-25270-21	60T	165	+/-5	125	+/-7	40	230	25	—	Exposed	SPST	Normally Closed	3/8
47-23610-19	60T	165	+/-5	145	+/-5	20	230	25	Yellow/White	Enclosed	SPST	Normally Closed	25/32
470031	60T	170	+/-5	125	+/-7	45	230	25	—	Exposed	SPST	Normally Closed	3/8

(continued on next page)

# TEMPERATURE LIMIT CONTROL SWITCHES

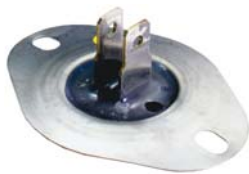
## LIMIT CONTROL SWITCHES – AUTO RESET



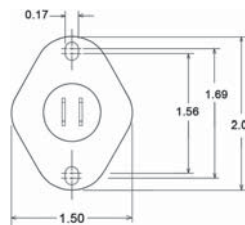
### Limit Control Switches – Auto Reset (Large Flanged Airstream – 60T) – CONTINUED

**THERMODISC**

PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	CLOSE TEMP (°F)	TOLERANCE CLOSE TEMP (°F)	NOM TEMP DIFFERENCE	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT	MOUNTING INSERTION DEPTH-MAX (IN)
47-25117-02	60T	170	+/-5	130	+/-7	40	230	25	—	Enclosed	SPST	Normally Closed	3/8
47-25261-16	60T	170	+/-5	130	+/-9	40	230	25	—	Enclosed	SPST	Normally Closed	3/8
47-23610-21	60T	175	+/-5	155	+/-5	20	230	25	Red/White	Enclosed	SPST	Normally Closed	25/32
47-23113-08	60T	180	+/-6	100	+/-8	80	230	25	Blue	Enclosed	SPST	Normally Closed	3/8
47-23113-02	60T	180	+/-6	100	+/-8	80	230	25	Blue	Enclosed	SPST	Normally Closed	3/8
PD470041	60T	180	+/-5	135	+/-7	45	230	25	—	Exposed	SPST	Normally Closed	3/8
47-19554-89	60T	180	+/-5	140	+/-8	40	230	25	Red	Enclosed	SPST	Normally Closed	3/8
PD476605	60T	180	+/-5	140	+/-5	40	230	25	Red	Enclosed	SPST	Normally Closed	3/8
47-25117-03	60T	180	+/-5	140	+/-7	40	230	25	—	Enclosed	SPST	Normally Closed	3/8
47-23113-07	60T	180	+/-5	150	+/-6	30	230	25	Green	Enclosed	SPST	Normally Closed	3/8
47-23113-01	60T	180	+/-5	150	+/-6	30	230	25	Green	Enclosed	SPST	Normally Closed	3/8
47-23610-25	60T	185	+/-5	165	+/-5	20	230	25	Pink/White	Enclosed	SPST	Normally Closed	25/32
47-23113-10	60T	190	+/-6	110	+/-8	80	230	25	Red	Enclosed	SPST	Normally Closed	3/8
47-23113-05	60T	190	+/-6	110	+/-8	80	230	25	Red	Enclosed	SPST	Normally Closed	3/8
PD470040	60T	190	+/-5	145	+/-7	45	230	25	—	Exposed	SPST	Normally Closed	3/8
47-23113-03	60T	190	+/-5	150	+/-7	40	230	25	Yellow	Enclosed	SPST	Normally Closed	3/8
47-25117-04	60T	190	+/-5	150	+/-7	40	230	25	—	Enclosed	SPST	Normally Closed	3/8
47-23610-27	60T	190	+/-5	170	+/-5	20	230	25	Orange/White	Enclosed	SPST	Normally Closed	25/32
47-23113-09	60T	200	+/-6	120	+/-8	80	230	25	White	Enclosed	SPST	Normally Closed	3/8
47-23113-04	60T	200	+/-6	120	+/-8	80	230	25	White	Enclosed	SPST	Normally Closed	3/8
47-19554-41	60T	200	+/-6	120	+/-8	80	230	25	White	Enclosed	SPST	Normally Closed	3/8
47-19554-45	60T	200	+/-5	160	+/-7	40	230	25	Red	Enclosed	SPST	Normally Closed	3/8
47-25117-05	60T	200	+/-5	160	+/-7	40	230	25	—	Enclosed	SPST	Normally Closed	3/8
47-17359-30	60T	200	+/-5	180	+/-5	20	230	25	Red	Enclosed	SPST	Normally Closed	3/8
47-23610-23	60T	200	+/-5	180	+/-5	20	230	25	Green/White	Enclosed	SPST	Normally Closed	25/32
PD476608	60T	210	+/-6	165	+/-8	45	230	25	—	Enclosed	SPST	Normally Closed	3/8
47-23610-29	60T	210	+/-5	190	+/-5	20	230	25	Violet/White	Enclosed	SPST	Normally Closed	25/32
47-23113-06	60T	215	+/-7	135	+/-9	80	230	25	Orange	Enclosed	SPST	Normally Closed	3/8



### Limit Control Switches – Auto Reset (Large Flanged Airstream – 44T Low Voltage)



**THERMODISC**

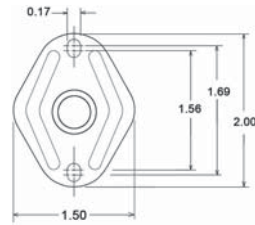
PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	CLOSE TEMP (°F)	TOLERANCE CLOSE TEMP (°F)	NOM TEMP DIFFERENCE	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT	MOUNTING INSERTION DEPTH-MAX (IN)
47-102436-07	44T	100	+/-8	80	+/-9	20	26	1	Brown	Enclosed	SPST	Normally Closed	3/8
47-102436-06	44T	110	+/-8	90	+/-9	20	26	1	Purple	Enclosed	SPST	Normally Closed	3/8
47-102436-04	44T	115	+/-8	95	+/-9	20	26	1	Red	Enclosed	SPST	Normally Closed	3/8
470015	44T	120	+/-8	100	+/-9	20	26	1	Yellow	Enclosed	SPST	Normally Closed	3/8
47-102436-03	44T	125	+/-8	105	+/-9	20	26	1	Blue	Enclosed	SPST	Normally Closed	3/8
47-102436-08	44T	130	+/-8	110	+/-9	20	26	1	Black	Enclosed	SPST	Normally Closed	3/8
47-102436-05	44T	135	+/-8	115	+/-9	20	26	1	Green	Enclosed	SPST	Normally Closed	3/8
470018	44T	145	+/-8	125	+/-9	20	26	1	Orange	Enclosed	SPST	Normally Closed	3/8

# TEMPERATURE LIMIT CONTROL SWITCHES

## LIMIT CONTROL SWITCHES – AUTO RESET



**Limit Control Switches – Auto Reset  
(Large Flanged Airstream – 36T)**

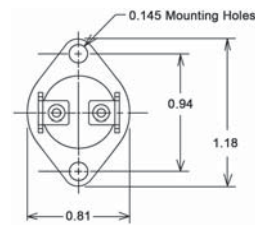


**THERMODISC**

PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	CLOSE TEMP (°F)	TOLERANCE CLOSE TEMP (°F)	NOM TEMP DIFFERENCE	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT	MOUNTING INSERTION DEPTH-MAX (IN)
47-25334-01	36T	145	+/-5	125	+/-7	20	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	3/16



**Limit Control Switches – Auto Reset  
(Small Flanged Airstream – 36T)**



**THERMODISC**

PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	CLOSE TEMP (°F)	TOLERANCE CLOSE TEMP (°F)	NOM TEMP DIFFERENCE	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT	MOUNTING INSERTION DEPTH-MAX (IN)
47-23118-01	36T	85	+/-5	70	+/-6	15	120 / 230	15 / 10	—	Open	SPST	Normally Closed	3/16



**Limit Control Switches – Auto Reset  
(Flangeless Airstream – 60T)**

**THERMODISC**

PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	CLOSE TEMP (°F)	TOLERANCE CLOSE TEMP (°F)	NOM TEMP DIFFERENCE	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT	MOUNTING INSERTION DEPTH-MAX (IN)
PD476606	60T	120	+/-5	100	+/-5	20	230	25	White	Enclosed	SPST	Normally Closed	3/8
425056	60T	140	+/-5	100	+/-7	40	230	25		Exposed	SPST	Normally Closed	3/8
425057	60T	140	+/-5	110	+/-10	40	230	25		Exposed	SPST	Normally Closed	3/8
425055	60T	145	+/-5	105	+/-7	40	230	25		Exposed	SPST	Normally Closed	3/8
PD455215	60T	150	+/-6	100	+/-10	50	230	25		Exposed	SPST	Normally Closed	3/8
PD425054	60T	155	+/-5	105	+/-7	50	230	25		Exposed	SPST	Normally Closed	3/8
470004	60T	160	+/-5	120	+/-7	40	230	25		Exposed	SPST	Normally Closed	3/8
425071	60T	165	+/-5	125	+/-7	40	230	25		Exposed	SPST	Normally Closed	3/8
425053	60T	170	+/-5	120	+/-7	50	230	25		Exposed	SPST	Normally Closed	3/8



**Limit Control Switches – Auto Reset  
(Flangeless Surface Mount – 60T)**

**THERMODISC**

PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	CLOSE TEMP (°F)	TOLERANCE CLOSE TEMP (°F)	NOM TEMP DIFFERENCE	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT
47-23117-04	60T	75	+/-5	65	+/-6	10	230	25	White	Enclosed	SPST	Normally Closed
47-23117-01	60T	80	+/-3	70	+/-3	10	230	25	Gray	Enclosed	SPST	Normally Closed
47-23117-03	60T	85	+/-3	75	+/-3	10	230	25	Purple	Enclosed	SPST	Normally Closed

# TEMPERATURE LIMIT CONTROL SWITCHES

## LIMIT CONTROL SWITCHES – AUTO RESET



**Limit Control Switches – Auto Reset**  
(Board Mount 90 Degree Strap Angle – 36T)

**THERMODISC**

PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	CLOSE TEMP (°F)	TOLERANCE CLOSE TEMP (°F)	NOM TEMP DIFFERENCE	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT	MOUNTING INSERTION DEPTH-MAX (IN)	MOUNTING BOARD DIM (IN)
47-21711-01	36T	100	+/-5	80	+/-5	20	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	7	1-7/8 x 2-3/4
47-21711-20	36T	110	+/-5	95	+/-5	15	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	7	1-7/8 x 2-3/4
47-25349-10	36T	120	+/-5	100	+/-7	20	120 / 230	15 / 10	Tan/Tan	Enclosed	SPST	Normally Closed	3	1-5/8 x 1-7/16
47-25349-14	36T	130	+/-5	110	+/-7	20	120 / 230	15 / 10	Blue/Yellow	Enclosed	SPST	Normally Closed	3	1-5/8 x 1-7/16
47-21711-08	36T	130	+/-5	110	+/-5	20	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	7	1-7/8 x 2-3/4
47-104990-02	36T	135	+/-5	115	+/-7	20	120 / 230	15 / 10	Blue/Red	Enclosed	SPST	Normally Closed	3	1-9/16 x 1-3/4
47-25349-16	36T	135	+/-5	115	+/-7	20	120 / 230	15 / 10	Blue/Red	Enclosed	SPST	Normally Closed	3	1-5/8 x 1-7/16
47-21711-12	36T	135	+/-5	115	+/-5	20	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	7	1-7/8 x 2-3/4
47-25349-09	36T	140	+/-5	120	+/-7	20	120 / 230	15 / 10	Yellow/Black	Enclosed	SPST	Normally Closed	3	1-5/8 x 1-7/16
47-104990-01	36T	145	+/-5	125	+/-7	20	120 / 230	15 / 10	Black/Red	Enclosed	SPST	Normally Closed	3	1-9/16 x 1-3/4
47-25349-11	36T	145	+/-5	125	+/-7	20	120 / 230	15 / 10	Black/Red	Enclosed	SPST	Normally Closed	3	1-5/8 x 1-7/16
47-102473-01	36T	150	+/-6	130	+/-9	20	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	3	1-7/8 x 2-3/4
47-25349-03	36T	150	+/-5	130	+/-7	20	120 / 230	15 / 10	Yellow/Yellow	Enclosed	SPST	Normally Closed	3	1-5/8 x 1-7/16
47-104990-04	36T	150	+/-5	130	+/-7	20	120 / 230	15 / 10	Yellow/Yellow	Enclosed	SPST	Normally Closed	3	1-9/16 x 1-3/4
47-104990-05	36T	160	+/-5	140	+/-7	20	120 / 230	15 / 10	Red/Red	Enclosed	SPST	Normally Closed	3	1-9/16 x 1-3/4
47-25349-01	36T	160	+/-5	140	+/-7	20	120 / 230	15 / 10	Red/Red	Enclosed	SPST	Normally Closed	3	1-5/8 x 1-7/16
47-21711-07	36T	160	+/-5	140	+/-5	20	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	7	1-7/8 x 2-3/4
47-25349-12	36T	165	+/-5	145	+/-7	20	120 / 230	15 / 10	Black/Green	Enclosed	SPST	Normally Closed	3	1-5/8 x 1-7/16
47-25349-02	36T	170	+/-5	150	+/-7	20	120 / 230	15 / 10	Blue/Blue	Enclosed	SPST	Normally Closed	3	1-5/8 x 1-7/16
47-102473-02	36T	170	+/-6	150	+/-9	20	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	3	1-7/8 x 2-3/4
47-104990-03	36T	170	+/-5	150	+/-7	20	120 / 230	15 / 10	Blue/Blue	Enclosed	SPST	Normally Closed	3	1-9/16 x 1-3/4
47-21711-10	36T	170	+/-5	150	+/-5	20	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	7	1-7/8 x 2-3/4
47-25349-17	36T	175	+/-5	155	+/-7	20	120 / 230	15 / 10	Blue/Tan	Enclosed	SPST	Normally Closed	3	1-5/8 x 1-7/16
47-25349-04	36T	180	+/-5	160	+/-7	20	120 / 230	15 / 10	Black/Black	Enclosed	SPST	Normally Closed	3	1-5/8 x 1-7/16
47-21711-11	36T	180	+/-5	160	+/-5	20	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	7	1-7/8 x 2-3/4
47-25349-15	36T	185	+/-5	165	+/-7	20	120 / 230	15 / 10	Brown/Orange	Enclosed	SPST	Normally Closed	3	1-5/8 x 1-7/16
47-25349-13	36T	190	+/-5	170	+/-7	20	120 / 230	15 / 10	Yellow/Red	Enclosed	SPST	Normally Closed	3	1-5/8 x 1-7/16
47-21711-03	36T	190	+/-5	170	+/-5	20	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	3	1-7/8 x 2-3/4
47-102473-03	36T	190	+/-6	170	+/-9	20	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	3	1-7/8 x 2-3/4
47-21711-15	36T	190	+/-7	170	+/-5	20	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	7	1-7/8 x 2-3/4
47-25349-05	36T	200	+/-5	180	+/-7	20	120 / 230	15 / 10	Orange/Orange	Enclosed	SPST	Normally Closed	3	1-5/8 x 1-7/16
47-21711-04	36T	200	+/-5	180	+/-5	20	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	7	1-7/8 x 2-3/4
47-102473-04	36T	210	+/-6	190	+/-9	20	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	3	1-7/8 x 2-3/4
47-25349-06	36T	210	+/-5	190	+/-7	20	120 / 230	15 / 10	Brown/Brown	Enclosed	SPST	Normally Closed	3	1-5/8 x 1-7/16
47-21711-16	36T	210	+/-7	190	+/-5	20	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	7	1-7/8 x 2-3/4
47-25349-07	36T	220	+/-5	200	+/-7	20	120 / 230	15 / 10	Green/Green	Enclosed	SPST	Normally Closed	3	1-5/8 x 1-7/16
47-25349-08	36T	230	+/-5	210	+/-7	20	120 / 230	15 / 10	White/White	Enclosed	SPST	Normally Closed	3	1-5/8 x 1-7/16

# TEMPERATURE LIMIT CONTROL SWITCHES

## LIMIT CONTROL SWITCHES – AUTO RESET



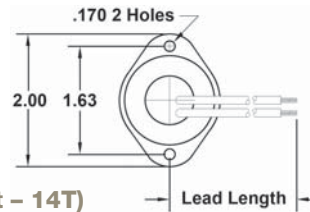
**Limit Control Switches – Auto Reset**  
(Board Mount 60 Degree Strap Angle – 36T)

**THERMODISC**

PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	CLOSE TEMP (°F)	TOLERANCE CLOSE TEMP (°F)	NOM TEMP DIFFERENCE	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT	MOUNTING INSERTION DEPTH-MAX (IN)	MOUNTING BOARD DIM (IN)
47-25350-13	36T	130	+/-5	110	+/-7	20	120/230	15/10	Blue/Yellow	Enclosed	SPST	Normally Closed	3	1-3/4 x 1-9/16
47-25350-04	36T	140	+/-5	120	+/-7	20	120/230	15/10	Black/Black	Enclosed	SPST	Normally Closed	3	1-3/4 x 1-9/16
47-25350-10	36T	150	+/-5	130	+/-7	20	120/230	15/10	Red/White	Enclosed	SPST	Normally Closed	3	1-3/4 x 1-9/16
47-25350-11	36T	155	+/-5	135	+/-7	20	120/230	15/10	Blue/White	Enclosed	SPST	Normally Closed	3	1-3/4 x 1-9/16
47-25350-05	36T	160	+/-5	140	+/-7	20	120/230	15/10	Orange/Orange	Enclosed	SPST	Normally Closed	3	1-3/4 x 1-9/16
47-25350-06	36T	170	+/-5	150	+/-7	20	120/230	15/10	Brown/Brown	Enclosed	SPST	Normally Closed	3	1-3/4 x 1-9/16
47-25350-07	36T	180	+/-5	160	+/-7	20	120/230	15/10	Green/Green	Enclosed	SPST	Normally Closed	3	1-3/4 x 1-9/16
47-25350-01	36T	190	+/-5	170	+/-7	20	120/230	15/10	Red/Red	Enclosed	SPST	Normally Closed	3	1-3/4 x 1-9/16
47-25350-12	36T	195	+/-5	175	+/-7	20	120/230	15/10	Green/Tan	Enclosed	SPST	Normally Closed	3	1-3/4 x 1-9/16
47-25350-09	36T	200	+/-5	180	+/-7	20	120/230	15/10	Tan/Tan	Enclosed	SPST	Normally Closed	3	1-3/4 x 1-9/16
47-25350-02	36T	210	+/-5	190	+/-7	20	120/230	15/10	Blue/Blue	Enclosed	SPST	Normally Closed	3	1-3/4 x 1-9/16
47-24006-08	36T	220	+/-6	200	+/-8	20	120/230	15/10	White/White	Enclosed	SPST	Normally Closed	3	1-3/4 x 1-9/16



**Limit Control Switches – Auto Reset (Flanged Surface Mount – 14T)**



**THERMODISC**

PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	CLOSE TEMP (°F)	TOLERANCE CLOSE TEMP (°F)	NOM TEMP DIFFERENCE	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT
47-22971-01	14T	100	+/-6	50	+/-6	50	120 / 230	25 / 25	—	Enclosed	SPST	Open on Rise



**Limit Control Switches/Defrost Sensors – Auto Reset (Tube Mount – 14T / 37T)**

**THERMODISC**

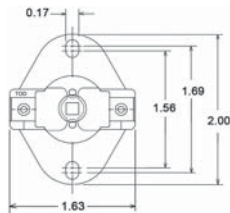
PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	CLOSE TEMP (°F)	TOLERANCE CLOSE TEMP (°F)	NOM TEMP DIFFERENCE	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	DISC FACE	SWITCH TYPE	CONTACT ORIENT	MOUNTING
47-23683-02	37T	20	+/-5	30	+/-5	10	120 / 230	10 / 5	Enclosed	SPST	Close on Rise	3/8 in. Tube
47-23683-06	37T	30	+/-5	40	+/-5	10	120 / 230	10 / 5	Enclosed	SPST	Close on Rise	1-3/8 in. Tube
47-23683-04	37T	30	+/-5	40	+/-5	10	120 / 230	10 / 5	Enclosed	SPST	Close on Rise	7/8 in. Tube
47-21777-04	37T	50	+/-5	28	+/-3	22	120 / 230	10 / 5	Enclosed	SPST	Open on Rise	3/8 in. Tube
47-23136-02	37T	70	+/-5	30	+/-5	40	120 / 230	10 / 5	Enclosed	SPST	Open on Rise	3/8 in. Tube
47-21400-03	37T	101	+/-5	81	+/-5	80	120 / 230	10 / 5	Enclosed	SPST	Open on Rise	1/2 in. Tube
47-21400-01	37T	101	+/-5	81	+/-5	80	120 / 230	10 / 5	Enclosed	SPST	Open on Rise	3/8 in. Tube
47-21101-03	14T	221	+/-9	191	+/-5	30	120 / 230	25 / 25	Enclosed	SPST	Open on Rise	7/8 in. Tube
47-21555-01	37T	285	+/-9	140	+/-20	145	120 / 230	10 / 5	Enclosed	SPST	Open on Rise	1/2 in. Tube

# TEMPERATURE LIMIT CONTROL SWITCHES

## LIMIT CONTROL SWITCHES – MANUAL RESET

### Limit Control Switches – Manual Reset (Large Flanged Airstream – 60T)

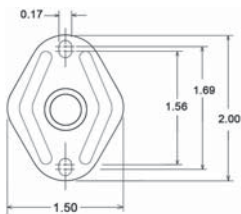
**THERMODISC**



PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT	MOUNTING INSERTION DEPTH MAX (IN)
47-21900-13	60T	150	+/-8	230	25	—	Exposed	SPST	Normally Closed	3/8
47-25118-01	60T	160	+/-5	230	25	—	Enclosed	SPST	Normally Closed	3/8
470038	60T	160	+/-5	230	25	—	Exposed	SPST	Normally Closed	3/8
47-21900-21	60T	170	+/-6	230	25	—	Exposed	SPST	Normally Closed	3/8
47-21900-06	60T	180	+/-5	230	25	—	Exposed	SPST	Normally Closed	3/8
47-25118-02	60T	200	+/-5	230	25	—	Enclosed	SPST	Normally Closed	3/8
47-21900-05	60T	200	+/-8	230	25	—	Exposed	SPST	Normally Closed	3/8
47-21900-01	60T	230	+/-7	230	25	—	Exposed	SPST	Normally Closed	3/8
47-21900-16	60T	250	+/-6	230	25	—	Exposed	SPST	Normally Closed	3/8

### Limit Control Switches – Manual Reset (Large Flanged Airstream – 36T)

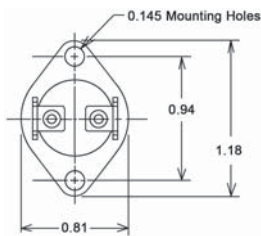
**THERMODISC**



PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT	MOUNTING INSERTION DEPTH MAX (IN)
47-22383-38	36T	190	+/-8	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	3/16
47-22383-33	36T	230	+/-10	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	3/16
47-22383-13	36T	260	+/-14	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	3/16
47-22383-37	36T	340	+/-16	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	3/16

### Limit Control Switches – Manual Reset (Small Flanged Airstream – 36T)

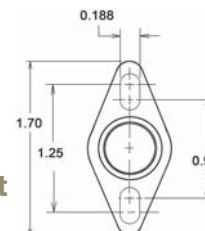
**THERMODISC**



PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT	MOUNTING INSERTION DEPTH MAX (IN)
47-22453-01	36T	130	+/-8	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	3/8
47-22453-02	36T	135	+/-8	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	3/8
47-22862-01	36T	220	+/-10	120 / 230	15 / 10	Blue	Enclosed	SPST	Normally Closed	3/16
47-22861-04	36T	250	+/-12	120 / 230	15 / 10	Red	Exposed	SPST	Normally Closed	3/16
47-22862-04	36T	260	+/-12	120 / 230	15 / 10	Orange	Enclosed	SPST	Normally Closed	3/16
47-22862-02	36T	280	+/-12	120 / 230	15 / 10	Silver	Enclosed	SPST	Normally Closed	3/16
47-22861-02	36T	300	+/-14	120 / 230	15 / 10	Blue	Exposed	SPST	Normally Closed	5/32
47-22861-01	36T	350	+/-16	120 / 230	15 / 10	—	Exposed	SPST	Normally Closed	5/32
47-100241-01	36T	400	+/-20	120 / 230	15 / 10	—	Enclosed	SPST	Normally Closed	5/32

### Limit Control Switches – Manual Reset (Special Small Flanged Airstream – 36T)

**THERMODISC**



PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT	MOUNTING INSERTION DEPTH MAX (IN)
47-22861-03	36T	250	+/-12	120 / 230	15 / 10	—	Exposed	SPST	Normally Closed	3/16

## TEMPERATURE LIMIT CONTROL SWITCHES

### LIMIT CONTROL SWITCHES – MANUAL RESET

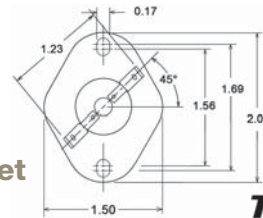
#### Limit Control Switches – Manual Reset

(Flangeless Surface Mount – 60T)

**THERMODISC**



PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT
47-22712-82	60T	310	+/-8	230	25	Red	Enclosed	SPST	Normally Closed



#### Limit Control Switches – Manual Reset

(Flanged Surface Mount – 36T)

**THERMODISC**



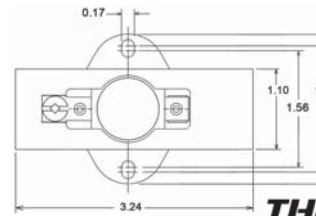
PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	COLOR CODE	DISC FACE	SWITCH TYPE	CONTACT ORIENT
47-22906-02	36T	190	+/-10	120 / 230	15 / 10		Enclosed	SPST	Normally Closed

### LIMIT CONTROL SWITCHES – NONRESETTABLE

#### Limit Control Switches –

Non-Resettable (Flanged Airstream – 61F)

**THERMODISC**

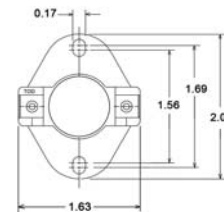


PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	DISC FACE	SWITCH TYPE	CONTACT ORIENT	MOUNTING INSERTION DEPTH MAX (IN)
470027	61F	225	+/-10	575	48	Enclosed	SPST	Normally Closed	3/8
47-41590-02	61F	300	+/-8	575	48	Enclosed	SPST	Normally Closed	3/8
47-41590-03	61F	325	+/-12	575	48	Enclosed	SPST	Normally Closed	3/8

#### Limit Control Switches –

Non-Resettable (Flanged Airstream – 60F)

**THERMODISC**



PART NO	TOD SWITCH SERIES	OPEN TEMP (°F)	TOLERANCE OPEN TEMP (°F)	MAX VOLTAGE RATING (VAC)	MAX CURRENT RATING (A)	DISC FACE	SWITCH TYPE	CONTACT ORIENT	MOUNTING INSERTION DEPTH MAX (IN)
470032	60F	208	+/-10	575	25	Exposed	SPST	Normally Closed	3/8
470034	60F	200	+/-8	575	25	Exposed	SPST	Normally Closed	3/8

## TEMPERATURE LIMIT CONTROLS

### Temperature Limit Controls – Fuse Links



PART NO	VENDOR PART NO	TEMP RATING(°F)	RESISTIVE RATING @120V (°F)	RESISTIVE RATING @120V (°F)
PD442006	G5AM0602141C	285	25	21
44-20037-03	G4AM0600167C482643	333	15	10



## BLOCKED VENT TEMPERATURE LIMIT CONTROL SWITCH



### Blocked Vent Temperature Limit Control Switch – Manual Reset



This device is recommended for installations with oil fired appliances that normally operate with vent systems under negative pressure.

- Detects blockages by responding to hot flue gasses backing up through its heat transfer tube
- Can be wired to shut off the oil burner

PART NO	VENDOR	VENDOR PART NO	MAX VOLTAGE RATING (VAC)	MOTOR RATE @230V (FLA/LRA)	MOTOR RATE @120V (FLA/LRA)	SWITCH TYPE	CONTACT ORIENT	MOUNT INSERTION DEPTH MAX (IN)
47-102193-01	Field Controls	46483600 (WMO-1)	230	5 / 30	10 / 60	SPST	Normally Closed	3-1/2

## RESET LIMIT CONTROL



### Reset Limit Control – Fire Stat

**Honeywell**

The primary usage of the L4029E1029 is as a fire thermostat in the duct work of air conditioning and ventilating systems. The control opens a line or low voltage circuit if the air temperature reaches a critical level at the controller location. If the circulated

air reaches a temperature indicative of fire, the limit control shuts off the fan, preventing the fan from contributing to the spread of fire. Also suitable for use with any warm air furnace to provide positive lockout of the burner in the event of fan failure.

PART NO	VENDOR	VENDOR PART NO	OPEN TEMP (F)	MAX VOLT RATING (VAC)	MOTOR RATE @230V (FLA/LRA)	MOTOR RATE @120V (FLA/LRA)	SWITCH TYPE	CONTACT ORIENT	MOUNTING INSERTION DEPTH MAX (IN)
L4029E1029	Honeywell	L4029E1029/B	200	230	5 / 30	10 / 60	SPST	Normally Closed	3

## FAN & LIMIT SWITCHES



### Fan & Limit Switches – Honeywell L4064 Series

**Honeywell**

PART NO	VENDOR PART NO	DIMENSIONS HxWxD (IN)	ELEMENT INSERTION LENGTH (IN)	HIGH LIMIT TEMP (F)	HIGH LIMIT DIFFERENTIAL TEMP (F)	FAN OFF (F)	FAN OFF (F)
47-20545-91	L4064B2228	4-9/32 x 3 x 1-9/32	5	100-250	25	65-215	50-200
47-20545-92	L4064B2236	4-9/32 x 3 x 1-9/32	8	100-250	25	65-215	50-200
47-20545-93	L4064B2210	4-9/32 x 3 x 1-9/32	11-1/2	100-250	25	65-215	50-200

## FAN CENTERS



PART NO	TERMINALS	TRANSFORMER PRIMARY VOLTAGE (V)	TRANSFORMER SECONDARY VOLTAGE (V)	TRANSFORMER CAPACITY (VA)	RELAY INCLUDED	RELAY CONTACT CONFIG	RELAY COIL VOLT (V)	REPLACE RELAY PART NO
47-19807-04	W, G, Y, R, C	120	24	40	No	SPDT	24	42-25104-06
47-17353-06	W, G, Y, R, C	120	24	40	Yes	SPDT	24	42-19736-02
47-25089-03	W, G, Y, R, C	120	24	40	Yes	SPDT	24	42-25104-06
47-25089-01	W, G, Y, R, C	120,208,230	24	40	Yes	DPDT	24	42-25106-01

## SAIL SWITCHES



Sail switches respond to the air velocity in duct work, and can be used to control accessory equipment such as humidifiers or electronic air cleaners.

### Sail Switch – SPST

**Honeywell**

PART NO	VENDOR PART NO	SWITCH TYPE	OPERATING VELOCITY (FPM)	DIMENSIONS H X W X D (IN)	INSERTION LENGTH (IN)	SAIL DIMENSIONS	MAX AMBIENT TEMP SWITCH/SAIL (°F)	MOTOR FLA @120V (A)	MOTOR LRA @120V (A)	MOTOR FLA @230V (A)	MOTOR LRA @230V (A)
41-25064-01	S437A1025	SPST	1900-2250	2-15/16 x 3-3/4 x 2	3-1/2	1-1/2 in. x 4 in.	150 / 150	8.0	48.0	5.1	30.6

## SAIL SWITCHES



### Sail Switch – SPDT

**Honeywell**

PART NO	VENDOR PART NO	SWITCH TYPE	OPERATING VELOCITY (FPM)	DIMENSIONS H X W X D (IN)	INSERTION LENGTH (IN)	SAIL DIMENSIONS	MAX AMBIENT TEMP SWITCH/SAIL (°F)	MOTOR FLA @120V (A)	MOTOR LRA @120V (A)	MOTOR FLA @230V (A)	MOTOR LRA @230V (A)
41-25081-01	S688A1007	SPDT	75-250	2-15/16 x 3-3/4 x 2	10	5 in. wide (max), 26.2 sq. in. of area	125/170	NO: 2.0, NC: 1.0	NO: 12.0, NC: 6.0	NO: 1.0, NC: 0.5	NO: 6.0, NC: 3.0

## CURRENT SENSING RELAY



### Current Sensing Relay

**Honeywell**

Used with 120V or 230V blower motors, the Current Sensing Relay provides a convenient means of detecting blower activation and then energizing accessory equipment such as humidifiers or electronic air cleaners.

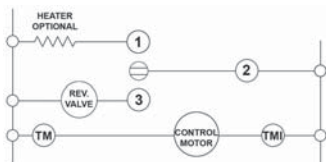
PART NO	DESCRIPTION
32001754-001	Current Sensing Relay

## DEFROST CONTROLS



### Ranco E15 Mechanical Defrost Controls

PART NO	VENDOR PART NO	TYPE	VOLTAGE (VAC)	FREQ (Hz)	OUTPUT FORM	DEFROST TIME (MIN)	DEFROST INTERVAL (MIN)	NOMINAL INITIATION TEMP (F)	NOMINAL TERM TEMP (F)	CAPILLARY TUBE LENGTH (IN)
47-17719-01	E15-2213-200	Mechanical Time-Temperature	230	50,60	SPDT	10	30, 45, 90	28	55	42
47-17719-02	E15-204-235	Mechanical Time-Temperature	24	50,60	SPDT	10	30, 45, 90	28	55	42



## REFRIGERANT PRESSURE LIMIT CONTROLS

### HIGH PRESSURE LIMIT CONTROLS – AUTO RESET

#### High Pressure Limit Controls – Auto Reset (Flare Fitting w/Cap Tube)

PART NO	RESET	OPEN PRESSURE (PSIG)	TOLERANCE OPEN PRESSURE (PSIG)	CLOSE PRESSURE (PSIG)	TOLERANCE CLOSE PRESSURE (PSIG)	REFRIG CONNECT TYPE	REFRIG CONNECT SIZE (IN)	CAPILLARY TUBE LENGTH (IN)
47-102491-01	Auto	610	+/-10	420	+/-15	Flare (Female SAE)	1/4	12

#### High Pressure Limit Controls – Auto Reset (Flare Fitting w/o Cap Tube)

PART NO	RESET	OPEN PRESSURE (PSIG)	TOLERANCE OPEN PRESSURE (PSIG)	CLOSE PRESSURE (PSIG)	TOLERANCE CLOSE PRESSURE (PSIG)	REFRIG CONNECT TYPE	REFRIG CONNECT SIZE (IN)	CAPILLARY TUBE LENGTH (IN)
47-21144-01	Auto	110	+/-5	85	+/-10	Flare (Female SAE)	1/4	—
47-102290-02	Auto	440	+/-10	290	+/-10	Flare (Female SAE)	1/4	—
47-102290-01	Auto	610	+/-10	420	+/-10	Flare (Female SAE)	1/4	—

# REFRIGERANT PRESSURE LIMIT CONTROLS

## HIGH PRESSURE LIMIT CONTROLS – AUTO RESET

### High Pressure Limit Controls – Auto Reset (Sweat w/Cap Tube)



PART NO	RESET	OPEN PRESSURE (PSIG)	TOLERANCE OPEN PRESSURE (PSIG)	CLOSE PRESSURE (PSIG)	TOLERANCE CLOSE PRESSURE (PSIG)	REFRIG CONNECT TYPE	REFRIG CONNECT SIZE (IN)	CAPILLARY TUBE LENGTH (IN)
47-23699-07	Manual	440	+/-10			Sweat	3/32	36
47-23699-01	Auto	440	+/-10	290	+/-10	Sweat	3/32	36
47-23699-04	Auto	610	+/-15	420	+/-15	Sweat	3/32	36
47-23699-08	Manual	655	+/-15			Sweat	3/32	36

### High Pressure Limit Controls – Auto Reset (Sweat w/o Cap Tube)



PART NO	RESET	OPEN PRESSURE (PSIG)	TOLERANCE OPEN PRESSURE (PSIG)	CLOSE PRESSURE (PSIG)	TOLERANCE CLOSE PRESSURE (PSIG)	REFRIG CONNECT TYPE	REFRIG CONNECT SIZE (IN)	REFRIG CONNECT END
47-101528-01	Auto	440	+/-10	270	+/-10	Sweat	5/16	Straight
47-103669-04	Auto	610	+/-10	420	+/-15	Sweat	1/4	90° Elbow
47-26184-01	Auto	610	+/-10	420	+/-15	Sweat	1/4	Straight
47-103669-02	Auto	610	+/-10	420	+/-15	Sweat	1/4	90° Elbow
47-26184-02	Auto	610	+/-10	420	+/-15	Sweat	5/16	90° Elbow

### Adj. High Pressure Limit Controls – Auto Reset (Flare Fitting w/Cap Tube)



PART NO	RESET	OPEN PRESSURE (PSIG)	CLOSE PRESSURE (PSIG)	REFRIG CONNECT TYPE	REFRIG CONNECT SIZE (IN)	CAP TUBE LENGTH (IN)
470005	Auto	100 - 400 (Adj)	Differential of 40 - 150 from Open Pressure	Flare (Female SAE)	1/4	36

## HIGH PRESSURE LIMIT CONTROLS – MANUAL RESET

### High Pressure Limit Controls – Manual Reset (Flare Fitting w/Cap Tube)



PART NO	RESET	OPEN PRESSURE (PSIG)	TOLERANCE OPEN PRESSURE (PSIG)	REFRIG CONNECT TYPE	REFRIG CONNECT SIZE (IN)	CAP TUBE LENGTH (IN)
47-23699-03	Manual	610	+/-15	Flare (Female SAE)	1/4	36

### High Pressure Limit Controls – Manual Reset (Flare Fitting w/o Cap Tube)



PART NO	RESET	OPEN PRESSURE (PSIG)	TOLERANCE OPEN PRESSURE (PSIG)	REFRIG CONNECT TYPE	REFRIG CONNECT SIZE (IN)	CAP TUBE LENGTH (IN)
47-102431-01	Manual	440	+/-10	Flare (Female SAE)	1/4	
47-102431-03	Manual	655	+/-15	Flare (Female SAE)	1/4	

### High Pressure Limit Controls – Manual Reset (Sweat w/Cap Tube)



PART NO	RESET	OPEN PRESSURE (PSIG)	TOLERANCE OPEN PRESSURE (PSIG)	REFRIG CONNECT TYPE	REFRIG CONNECT SIZE (IN)	CAP TUBE LENGTH (IN)
47-100901-01	Manual	425	+/-5	Sweat	3/32	36
47-21604-03	Manual	440	+/-10	Sweat	3/32	36
47-23699-06	Manual	610	+/-15	Sweat	3/32	36

### High Pressure Limit Controls – Manual Reset (Sweat w/o Cap Tube)



PART NO	RESET	OPEN PRESSURE (PSIG)	TOLERANCE OPEN PRESSURE (PSIG)	REFRIG CONNECT TYPE	REFRIG CONNECT SIZE (IN)	REFRIG CONNECT END
47-41884-02	Manual	400	+/-10	Sweat	1/4	Straight
47-41884-01	Manual	440	+/-10	Sweat	1/4	Straight

## REFRIGERANT PRESSURE LIMIT CONTROLS

### LOW PRESSURE CONTROLS – AUTO RESET

#### Low Pressure Controls – Auto Reset (Flare Fitting w/Cap Tube)

PART NO	RESET	OPEN PRESSURE (PSIG)	TOLERANCE OPEN PRESSURE (PSIG)	CLOSE PRESSURE (PSIG)	TOLERANCE CLOSE PRESSURE (PSIG)	REFRIG CONNECT TYPE	REFRIG CONNECT SIZE (IN)	CAPILLARY TUBE LENGTH (IN)
47-100902-02	Auto	15	+/-10	40	+/-10	Flare (Female SAE)	1/4	36
47-103670-06	Auto	15	+/-5	40	+/-5	Flare (Female SAE)	1/4	12

#### Low Pressure Controls – Auto Reset (Flare Fitting w/o Cap Tube)

PART NO	RESET	OPEN PRESSURE (PSIG)	TOLERANCE OPEN PRESSURE (PSIG)	CLOSE PRESSURE (PSIG)	TOLERANCE CLOSE PRESSURE (PSIG)	REFRIG CONNECT TYPE	REFRIG CONNECT SIZE (IN)	CAPILLARY TUBE LENGTH (IN)
47-103670-10	Auto	15	+/-5	40	+/-5	Flare (Female SAE)	1/4	—
47-102240-02	Auto	15	+/-4	40	+/-5	Flare (Female SAE)	1/4	—
47-42453-02	Auto	35	+/-4	60	+/-5	Flare (Female SAE)	1/4	—
47-102240-03	Auto	50	+/-7	95	+/-7	Flare (Female SAE)	1/4	—
47-103670-08	Auto	50	+/-7	95	+/-7	Flare (Female SAE)	1/44	—

#### Low Pressure Controls – Auto Reset (Sweat w/Cap Tube)

PART NO	RESET	OPEN PRESSURE (PSIG)	TOLERANCE OPEN PRESSURE (PSIG)	CLOSE PRESSURE (PSIG)	TOLERANCE CLOSE PRESSURE (PSIG)	REFRIG CONNECT TYPE	REFRIG CONNECT SIZE (IN)	CAPILLARY TUBE LENGTH (IN)
47-100902-01	Auto	15	+/-4	40	+/-5	Sweat	3/32	36

#### Low Pressure Controls – Auto Reset (Sweat w/o Cap Tube)

PART NO	RESET	OPEN PRESSURE (PSIG)	TOLERANCE OPEN PRESSURE (PSIG)	CLOSE PRESSURE (PSIG)	TOLERANCE CLOSE PRESSURE (PSIG)	REFRIG CONNECT TYPE	REFRIG CONNECT SIZE (IN)	REFRIG CONNECT END
47-100543-04	Auto	7	+/-3	22	+/-5	Sweat	5/16	90° Elbow
47-24332-05	Auto	7	+/-3	22	+/-5	Sweat	1/4	Straight
47-100246-01	Auto	15	+/-5	40	+/-5	Sweat	1/4	Straight
47-101529-03	Auto	15	+/-5	40	+/-5	Sweat	5/16	90° Elbow
47-103670-03	Auto	15	+/-5	40	+/-5	Sweat	1/4	90° Elbow
47-24332-03	Auto	25	+/-5	40	+/-5	Sweat	1/4	Straight
47-100543-03	Auto	25	+/-5	40	+/-5	Sweat	5/16	90° Elbow
47-101529-10	Auto	25	+/-5	40	+/-5	Sweat	5/16	90° Elbow
47-101529-08	Auto	50	+/-7	95	+/-7	Sweat	1/4	90° Elbow
47-26185-01	Auto	50	+/-7	95	+/-7	Sweat	5/16	Straight
47-103670-04	Auto	50	+/-7	95	+/-7	Sweat	1/4	90° Elbow
47-101529-09	Auto	50	+/-7	95	+/-7	Sweat	5/16	90° Elbow
47-103670-02	Auto	50	+/-7	95	+/-7	Sweat	1/4	90° Elbow
47-101529-05	Auto	90	+/-7	135	+/-7	Sweat	5/16	90° Elbow

## LOW AMBIENT CONTROLS – LOW PRESSURE CONTROLS

#### Low Ambient Controls – Low Pressure Controls (Flare Fitting w/Cap Tube)

PART NO	RESET	OPEN PRESSURE (PSIG)	TOLERANCE OPEN PRESSURE (PSIG)	CLOSE PRESSURE (PSIG)	TOLERANCE CLOSE PRESSURE (PSIG)	REFRIG CONNECT TYPE	REFRIG CONNECT SIZE (IN)	CAPILLARY TUBE LENGTH (IN)
47-100571-03	Auto	50	+/-7	90	+/-7	Flare (Female SAE)	1/4	36
47-25343-82	Auto	150	+/-10	275	+/-20	Flare (Female SAE)	1/4	36
47-100571-01	Auto	180	+/-10	320	+/-10	Flare (Female SAE)	1/4	36
47-25343-05	Auto	220	+/-10	320	+/-20	Flare (Female SAE)	1/4	36
47-100571-05	Auto	250	+/-10	380	+/-10	Flare (Female SAE)	1/4	36
47-100571-02	Auto	250	+/-10	450	+/-10	Flare (Female SAE)	1/4	36

## LOW AMBIENT CONTROLS – LOW PRESSURE CONTROLS



### Low Ambient Controls – Low Pressure Controls (Flare w/o Cap Tube)

PART NO	RESET	OPEN PRESSURE (PSIG)	TOLERANCE OPEN PRESSURE (PSIG)	CLOSE PRESSURE (PSIG)	TOLERANCE CLOSE PRESSURE (PSIG)	REFRIG CONNECT TYPE	REFRIG CONNECT SIZE (IN)	CAPILLARY TUBE LENGTH (IN)
47-26268-01	Auto	180	+/-10	320	+/-20	Flare (Female SAE)	1/4	—
47-21465-07	Auto	250	+/-15	450	+/-20	Flare (Female SAE)	1/4	—



### Low Ambient Controls – Low Pressure Controls (Sweat w/Cap Tube)

PART NO	RESET	OPEN PRESSURE (PSIG)	TOLERANCE OPEN PRESSURE (PSIG)	CLOSE PRESSURE (PSIG)	TOLERANCE CLOSE PRESSURE (PSIG)	REFRIG CONNECT TYPE	REFRIG CONNECT SIZE (IN)	CAPILLARY TUBE LENGTH (IN)
47-102478-01	Auto	250	+/-10	450	+/-10	Sweat	3/32	36
47-102478-02	Auto	150	+/-10	275	+/-20	Sweat	3/32	36



### Adj. Low Ambient Controls – Low Pressure Controls (Sweat w/Cap Tube)

PART NO	RESET	OPEN PRESSURE (PSIG)	CLOSE PRESSURE (PSIG)	REFRIG CONNECT TYPE	REFRIG CONNECT SIZE (IN)	CAP TUBE LENGTH (IN)
47-17374-81	Auto	150 - 400 (Adj)	Differential of 30 - 65 from Open Pressure	Sweat	1/4	60

## ICM HEAD PRESSURE CONTROLS



### 47-ICM325HNC ICM Head Pressure Control (120-460V)



- Integral heat pump bypass circuitry allows electronic bypass of speed control
- Eliminates overshoots common to on/off and pressure switch controls
- Helps prevent evaporator freeze-ups, low pressure cut-outs and liquid-slugged compressors in low ambient conditions
- Hard start, low temperature bypass, isolated 24VAC supply
- Controls up to three refrigerant circuits
- Typical application: A/C and heat pumps

PART NO	VENDOR PART NO	V-P-H	CONTROL INPUT VOLT (VAC)	OUTPUT CURRENT MAX (A)	OUTPUT CURRENT MIN (MA)	MOD (°F)	DIM LxWxD (IN)	ACT CROSS REFERENCE	HOFFMAN CROSS REFERENCE	JOHNSON CONTROLS CROSS REF	RANCO CROSS REFERENCE
47-ICM325HNC	ICM325HNC	120-460-1-50,60	18-30	10	100	70-100	4-1/2 x 3 x 1-3/4	FM2000	800, 800A, 800AA, 814-50, 816-10	P66	E31



### 47-ICM326HNC/47-ICM326HM2 ICM Head Pressure Controls (120V,208V,230V)



- Integral heat pump bypass circuitry allows electronic bypass of speed control during heat pump operation
- Built in transformer eliminates cost, reduces installation time and simplifies wiring
- Helps prevent evaporator freeze-ups, low pressure cut-outs and liquid-slugged compressors in low ambient conditions
- Hard start, low temperature cutoff, high temperature bypass
- 47-ICM326HNC: Ideal for line voltage air conditioning and refrigeration
- 47-ICM326HM2: Ideal for low ambient conditions in frozen food, computer rooms, cooling tower, temperature sensitive environments

PART NO	VENDOR PART NO	V-P-H	CONTROL INPUT VOLT (VAC)	OUTPUT CURRENT MAX (A)	OUTPUT CURRENT MIN (MA)	MOD (°F)	DIM LxWxD (IN)	ACT CROSS REFERENCE	HOFFMAN CROSS REFERENCE	JOHNSON CONTROLS CROSS REF	RANCO CROSS REFERENCE
47-ICM326HNC	ICM326HN	120,208,230-1-50,60	120,208,230	10	100	70 - 100	4-1/2 x 3 x 2	FM4000	800, 800A, 800AA, 814-50, 816-10	P66	E31
47-ICM326HM2	ICM326HM2	120,208,230-1-50,60	120,208,230	10	100	80 - 105	4-1/2 x 3 x 2	—	—	—	—

## ICM HEAD PRESSURE CONTROLS



### 47-ICM327HNC ICM Head Pressure Control (460V)



- Integral heat pump bypass circuitry allows electronic bypass of speed control during heat pump operation
- Built in transformer eliminates cost, reduces installation time and simplifies wiring
- Helps prevent evaporator freeze-ups, low pressure cut-outs and liquid-slugged compressors in low ambient conditions
- Hard start, low temperature cutoff, high temperature bypass
- Ideal for line voltage air conditioning and refrigeration

PART NO	VENDOR PART NO	V-P-H	CONTROL INPUT VOLT (VAC)	OUTPUT CURRENT MAX (A)	OUTPUT CURRENT MIN (MA)	MOD (°F)	DIM LxWxD (IN)	ACT CROSS REFERENCE	HOFFMAN CROSS REFERENCE	JOHNSON CONTROLS CROSS REF	RANCO CROSS REFERENCE
47-ICM327HNC	ICM327HNC	460-1-50,60	18-30	10	100	70 - 100	4-1/2 x 3 x 2	FM4000	800, 800A, 800AA, 814-50, 816-10	P66	E31



### 47-ICM336/47-ICM337 ICM Head Pressure Controls (Three Phase)



- Temp., pressure, milliamp or DC voltage input
- True sine wave output
- Modulates voltage and frequency
- LCD display for easy setup and monitoring
- No need to change existing fan motor

PART NO	VENDOR PART NO	LINE INPUT VOLTAGE (VAC)	NO OF PHASES	FREQUENCY (Hz)	OUTPUT MOTOR (HP)	DIMENSIONS LxWxD (IN)	HOFFMAN CROSS REFERENCE	OPTIONAL PRESSURE TRANSDUCER
47-ICM336	ICM336	208,230	3	50,60	1-3	14 x 12-1/2 x 8-1/4	—	47-ICM380
47-ICM337	ICM337	460	3	50,60	1-5	14 x 12-1/2 x 8-1/4	Motormaster III	47-ICM380

## ICM HEAD PRESSURE CONTROLS – ACCESSORIES



### 47-ICM379 Replacement Temperature Probe



- Replacement probe for use with 47-ICM325HNC, 47-ICM326HNC, 47-ICM326HM2, and 47-ICM327HNC with optional heat pump bypass
- Temperature range: 70°F to 100°F
- Lead length: 79 inches

PART NO	VENDOR PART NO	DESCRIPTION
47-ICM379	ICM339	Temperature Probe



### 47-ICM380 Pressure Transducer



- Pressure range: 0-500 psi
- Optional pressure transducer for 47-ICM336 and 47-ICM337 3-phase head pressure controls
- Lead length: 72 inches
- Connections: 1/4 inch SAE Flare (F) with deflator

PART NO	VENDOR PART NO	DESCRIPTION
47-ICM380	ICM380	Pressure Transducer

# ICM MOTOR PROTECTION CONTROLS

## ICM THREE PHASE LINE VOLTAGE MONITORS

### 47-ICM400 Three Phase Voltage Monitor



High performance, low cost model with fully adjustable features. Protects against voltage unbalance, high/low voltage, phase loss, reversal, faulty power, incorrect sequencing and rapid short cycling.

- Seven bright fault LEDs

- Knob-adjustable features and system set points
- Identifies front and back side faults
- Reset mode – auto or manual (lockout)
- Universal voltage operation

PART NO	VENDOR PART NO	V-P-H	CONTROL VOLTAGE (VAC)	VOLTAGE UNBALANCE (%)	DELAY ON BREAK TIMER (MIN)	OUTPUT FORM	CONTACT RATING NO (A)	CONTACT RATING NC (A)	DIMENSIONS L x W x D
47-ICM400	ICM400	190-630-3-50,60	18-230	2-25	0.1-5	SPDT	10	6	6-1/2 x 4-1/4 x 1-1/2

PART NO	A-1 CROSS REFERENCE	COPELAND CROSS REFERENCE	DIVERSIFIED CROSS REFERENCE	MOTORS AVER CROSS REFERENCE	SSAC CROSS REFERENCE	TIMEMARK CROSS REFERENCE	WAGNER/DIVERSITECH CROSS REFERENCE
47-ICM400	EAC-800, EAC-8000, EAC-8002	—	AC-2020, AC-301, AC-302	455	QLM/QLV	265	DTP-3, WPC-800

### 47-ICM450 Three Phase Voltage Monitor – Programmable



Fully programmable three phase line voltage monitor with 25-fault memory, high temperature LCD display, easy setup, and clear diagnostic readout of system faults. Specifically designed to protect motors and other three phase loads from premature failure and damage due to common voltage faults such as voltage unbalance, over or under voltage, phase loss or reversal, incorrect sequencing, and rapid short cycling.

- Easy to configure – simple push-button setup

- Easy to customize – set points, variables and features are fully adjustable; may be defined by the user while in control SETUP mode
- Independent high and low voltage settings ideal for dual-voltage compressor applications
- Identifies front and back side faults
- Reset mode – auto or manual (lockout)
- Simultaneous voltage display – view all three phases without scrolling
- Universal voltage operation

PART NO	VENDOR PART NO	V-P-H	CONTROL VOLTAGE (VAC)	VOLTAGE UNBALANCE (%)	DELAY ON BREAK TIMER (MIN)	OUTPUT FORM	CONTACT RATING NO (A)	CONTACT RATING NC (A)	DIMENSIONS L x W x D
47-ICM450	ICM450	190-630-3-50,60	18-230	2-25	0.1-5	SPDT	10	6	6-1/2 x 4-1/4 x 1-1/2

PART NO	A-1 CROSS REFERENCE	COPELAND CROSS REFERENCE	DIVERSIFIED CROSS REFERENCE	MOTORS AVER CROSS REFERENCE	SSAC CROSS REFERENCE	TIMEMARK CROSS REFERENCE	WAGNER/DIVERSITECH CROSS REFERENCE
47-ICM450	EAC-800, EAC-8000, EAC-8002	085-0160-00	AC-2020, AC-301, AC-302	455	QLM/QLV	265	DTP-3, WPC-800

## ICM THREE PHASE LOSS AND REVERSAL PROTECTION MONITORS

The 47-ICM401C and 47-ICM402C are low cost three phase line monitors that provide single side protection against phase loss, reversal, and unbalance. Ideally suited to protect scroll and screw compressor from reverse protection.

- Bright LED indicators for ON and FAULT
- Highly reliable passive electronics; epoxy coated for added protection

- Easy to install; no adjustments
- Less than 1-second phase loss response
- Automatic reset from a fault condition
- Compact packaging; fits almost anywhere
- Works great with 47-ICM450 for load side monitoring of part winding start motors and multiple compressor systems
- Universal voltage operation

### 47-ICM401C Three Phase Loss and Reversal Protection Monitor (18-30V Control)



PART NO	VENDOR PART NO	V-P-H	CONTROL VOLTAGE (VAC)	OUTPUT FORM	CONTACT RATING NO (A)	DIMENSIONS L x W x D	MARS CROSS REFERENCE	SUPCO CROSS REFERENCE
47-ICM401C	ICM401C	190-600-3-50,60	18-30	STST	10	3-1/4 x 3 x 1-1/4	32536	TPMP2

## ICM MOTOR PROTECTION CONTROLS



### ICM THREE PHASE LOSS AND REVERSAL PROTECTION MONITORS

#### 47-ICM402C Three Phase Loss and Reversal Protection Monitor (120-230V Control)



PART NO	VENDOR PART NO	V-P-H	CONTROL VOLTAGE (VAC)	OUTPUT FORM	CONTACT RATING NO (A)	DIMENSIONS L x W x D	MARS CROSS REFERENCE	SUPCO CROSS REFERENCE
47-ICM402C	ICM402C	190-600-3-50,60	120,208,230	STST	30	3-1/4 x 3 x 1-1/4	32536	TPMP2

### ICM SINGLE PHASE MOTOR PROTECTOR

#### 47-ICM491 Single Phase Motor Protector



A very low cost, highly accurate, rugged, single-phase voltage monitor. It is designed to protect motors from low voltage, power interruptions, high voltage, and/or rapid short cycling.

- LED Indicators:
  - Green for normal conditions
  - Red rapid flash detecting high or low voltage

- Red blinking when unit is waiting for end of anti-short cycle delay
- Heavy duty relay output to operate control circuitry or contactor
- 5-second fault interrogation period prevent nuisance trips; Power is interrupted if abnormal for 66% of interrogation time

PART NO	VENDOR PART NO	VOLTAGE (VAC)	NO OF PHASES	FREQ (Hz)	OUTPUT FORM	CONTACT RATING NO (A)	CONTACT RATING NC (A)	DIM L x W x D	A-1 CROSS REFERENCE	DIVERSIFIED CROSS REFERENCE	MARS CROSS REFERENCE	WAGNER/DIVERSITECH CROSS REFERENCE
47-ICM491	ICM491	95-270	1	50,60	SPDT	5	5	3-1/4 x 3 x 1-1/4	EAC-401, EAC-402, EAC-403, EAC-404	CV-100-RS, CV-200-RS15, CV-200-RS20	32522, 32524, 32526	DSP-1

## AFTERMARKET REPLACEMENTS FOR OEM CONTROL BOARDS

### ICM OEM REPLACEMENT CONTROL BOARDS

#### Fan Blower Control 47-ICM270 (Replacement for Robertshaw)



- Dual function fan delay timer
- Controls the circulating fan in heat pump, air conditioning, and forced air systems

- Off delay purges ducts of residual air; On delay allows air to reach the proper comfort level prior to energizing the fan

PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQUENCY (HZ)	CONTACT RATING NO (V)	CONTACT RATING NO (A)	CONTACT RATING NC (V)	CONTACT RATING NC (A)	BLOWER ON DELAY (SECONDS)	BLOWER OFF DELAY (SECONDS)	ROBERT SHAW CROSS REFERENCE
47-ICM270	ICM270	18-30	60	230	20	230	10	30	90,120,150,180	695-003

#### Fan Blower Control 47-ICM271 (Replacement for Carrier, Robertshaw)

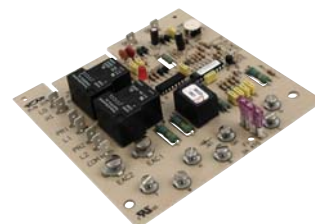


- Reliable solid state fan blower control
- Specifically designed to replace popular gas furnace centers
- Pin selectable blower delays

- Dual function fan delay timer
- Off delay purges ducts of residual air; On delay allows air to reach the proper comfort level prior to energizing the fan

PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQ (Hz)	CONTACT RATING NO (V)	CONTACT RATING NO (A)	CONTACT RATING NC (V)	CONTACT RATING NC (A)	HEAT ON DELAY (SEC)	HEAT OFF DELAY (SEC)	COOL OFF DELAY (SEC)	CARRIER CROSS REFERENCE	WAGNER/DIVERSITECH CROSS REFERENCE
47-ICM271	ICM271	18-30	60	120	20	120	10	75	105	90	302075-3, CES0110017, CES0110018 H84AA010, H84AA011 HH84AA012, HH84AA013/020, P771-7002	695-100

#### Fan Blower Control 47-ICM275 (Replacement for Carrier, Robertshaw)



- Off delay purges ducts of residual air; On delay allows air to reach the proper comfort level

- Integral short cycle protection

PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQUENCY (HZ)	HEAT ON DELAY (SECONDS)	HEAT OFF DELAY (SECONDS)	COOL OFF DELAY (SECONDS)	CARRIER CROSS REFERENCE	ROBERTSHAW CROSS REFERENCE
47-ICM275	ICM275	18-30	60	60	60-240	90	CES0110019, HH84AA001, HH84AA003, HH84AA005, HH84AA009, HH84AA014, HH84AA015, HH84AA021	695-101



## AFTERMARKET REPLACEMENTS FOR OEM CONTROL BOARDS



### ICM OEM REPLACEMENT CONTROL BOARDS

#### Fan Blower Control ICM277C (Replacement for Goodman)



- For circulating fan in heat pump, A/C and forced air systems
- Microprocessor-based fan blower control

PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQUENCY (HZ)	BLOWER ON DELAY (SEC)	BLOWER OFF DELAY (SEC)	GOODMAN CROSS REFERENCE
ICM277C	ICM277C	18-30	60	7	65	B1370735S, PCBFM131S



#### Furnace Control 47-ICM280 (Replacement for Goodman)



- Microprocessor-based fan blower
- Status LED for fault codes
- Twinning compatible with another 47-ICM280 board

PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQUENCY (HZ)	CONTACT RATING HIGH (V)	CONTACT RATING HIGH (A)	CONTACT RATING LOW (V)	CONTACT RATING LOW (A)	CONTACT RATING MOTOR (V)	CONTACT RATING MOTOR (HP)	CONTACT RATING INDUCER (V)
47-ICM280	ICM280	98-132	60	230	20	230	10	230	2	230

PART NO	CONTACT RATING INDUCER (A)	CONTACT RATING GAS VALVE (V)	CONTACT RATING GAS VALVE (A)	CONTACT RATING IGNITOR (V)	CONTACT RATING IGNITOR (A)	GOODMAN CROSS REFERENCE	UTEC CROSS REFERENCE	WHITE-RODGERS CROSS REFERENCE
47-ICM280	7	24	1	120	5	B1809906, B1809908, B1809910, B1809913, B1809913S	1012-933D	50T35-730 50T35-743



#### Furnace Control 47-ICM281 (Replacement for Carrier)



- Controls gas valve, ignitor, blower motor, inducer, humidifier and air cleaner
- Microprocessor-based
- Designed for 100% gas shutoff in case of ignition failure
- Twinning compatible
- Reverse polarity protection
- Secondary brownout voltage protection
- Compatible with 24 VAC standard thermostat
- Provides diagnostic LED to aid troubleshooting

PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQ (HZ)	CONTACT RATING INDUCER (V)	CONTACT RATING INDUCER (A)	CONTACT RATING GAS VALVE (V)	CONTACT RATING GAS VALVE (A)	CONTACT RATING VALVE (V)	CONTACT RATING VALVE (A)	CARRIER CROSS REFERENCE
47-ICM281	47-ICM281	98-132	60	120	4	30	1.5	120	5	CES0110057-00, CES0110057-01 CES0110057-02



#### Furnace Control 47-ICM282 (Replacement for Carrier)



- Controls gas valve, ignitor, blower motor, inducer, humidifier and air cleaner
- Microprocessor-based precision
- Software for enhanced controls operation in counterflow and downflow furnace applications
- 100% gas shutoff in case of ignition failure
- Twinning compatible
- Reverse polarity protection
- Secondary brownout voltage protection
- Compatible with 24 VAC standard thermostat
- Diagnostic fault codes/LED to aid troubleshooting

PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQ (HZ)	CONTACT RATING INDUCER (V)	CONTACT RATING INDUCER (A)	CONTACT RATING GAS VALVE (V)	CONTACT RATING GAS VALVE (A)	CONTACT RATING VALVE (V)	CONTACT RATING VALVE (A)	CARRIER CROSS REFERENCE
47-ICM282	ICM282A	98-132	60	120	4	30	1.5	120	5	HK42FZ004, HK42FZ007, HK42FZ008, HK42FZ009, HK42FZ011, HK42FZ013, HK42FZ016, 325878-751



#### Furnace Control 47-ICM284 (Replacement for York)



- The ICM284 control is microprocessor based using software to determine the sequence of operation, timing, trial for ignition, flame sensing and lockout. The control monitors the status of the room thermostat, limit and rollout switches, air pressure switch and flame sensor before energizing the vent motor, blower control, hot surface ignitor, and gas valve. The control provides diagnostic codes (flashing LEDs) to aid in testing and troubleshooting.
- Controls vent motor, blower control, hot surface ignitor and gas valve
  - Microprocessor-based
  - Designed for 100% gas shutoff in case of ignition failure
  - Monitors timing, trial for ignition, flame sensing and lockout
  - Diagnostic LEDs aid in testing/troubleshooting

PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQ (HZ)	CONTACT RATING INDUCER (V)	CONTACT RATING INDUCER (A)	CONTACT RATING GAS VALVE (V)	CONTACT RATING GAS VALVE (A)	CONTACT RATING VALVE (V)	CONTACT RATING VALVE (A)	YORK CROSS REFERENCE
47-ICM284	ICM284	208-230	60	120	4	30	1.5	120	5	031-00661-701, 031-01280-000, HS 8201, 100-00825-04

# ICM OEM REPLACEMENT CONTROL BOARDS

## ICM OEM REPLACEMENT CONTROL BOARDS

### Furnace Control 47-ICM287 (Replacement for Goodman)



The ICM287 control is microprocessor based using software to determine the sequence of operation and timing. The control also monitors the status of the gas valve before energizing the inducer and heat and cool blowers.

- Controls inducer and blower control; monitors timing and gas valve
- Microprocessor-based
- Designed for 100% gas shutoff in case of ignition failure

PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQUENCY (HZ)	GOODMAN CROSS REFERENCE
47-ICM287	ICM287	120	60	B18099-04

### Furnace Control 47-ICM289 (Replacement for Lennox)



- Controls inducer fan motor, blower fan and monitors limit switches

- Microprocessor-based
- Functions with all 24 VAC thermostats

PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQUENCY (HZ)	CONTACT RATING INDUCER (V)	CONTACT RATING INDUCER (V)	LENNOX CROSS REFERENCE
47-ICM289	ICM289	98-132	60	120	5	BCC1, BCC2, BCC3, 48K98, 45K48

### Furnace Control ICM2804 (Replacement for Carrier)



- Controls vent motor and blower control
- Microprocessor-based
- Monitors limit switch, pressure switch and gas valve

- 100% lockout safety feature
- Compatible with LP or Natural Gas
- Status LED for fault codes to aid in troubleshooting

PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQUENCY (HZ)	CONTACT RATING INDUCER (V)	CONTACT RATING INDUCER (V)	CARRIER CROSS REFERENCE
ICM2804	ICM2804	98-132	60	120	4	CES0110074-00, CES0110074-01

### Furnace Control ICM2805A (Replacement for Nordyne)



- Controls gas valve, inducer draft motor, circulating blower and hot surface ignitor
- Monitors timing, trial for ignition, flame sensing, lockout, plus pressure, rollout and limit switches.

- Microprocessor-based precision
- Twinning compatible with another ICM2805A furnace control
- Diagnostic LEDs aid in testing and troubleshooting

PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQ (HZ)	CONTACT RATING MOTOR (V)	CONTACT RATING MOTOR (HP)	CONTACT RATING INDUCER (V)	CONTACT RATING INDUCER (A)	CONTACT RATING GAS VALVE (V)	CONTACT RATING GAS VALVE (A)	NORDYNE CROSS REFERENCE
ICM2805A	ICM2805A	24,120,230	60	230	2	120	4	24	1	903106-Kit control boards for use with G3, G4, G5, G6, M2, M3 furnace modules

### Furnace Control 47-ICM300 (Replacement for Carrier, etc.)



- Low cost, time and temperature defrost
- HOLD input tracks compressor run times

- Test pins reduce test time by 256x
- Fixed defrost time; Pin-selectable intervals

PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQ (HZ)	OUTPUT FORM	CONTACT RATING NO (A)	DEFROST TIME (MINUTES)	DEFROST INTERVAL (MINUTES)	ACROAIRE CROSS REFERENCE	AMANA CROSS REFERENCE	ARTESIAN CROSS REFERENCE	CARRIER CROSS REFERENCE
47-ICM300	ICM300	18-30	50,60	Relay - SPST-NO	1	10	30,60,90	32312-00 3232140	C6430-1 C64310-1	10321-00	621

PART NO	COLEMAN CROSS REFERENCE	GOODMAN CROSS REFERENCE	HEIL QUAKER CROSS REFERENCE	HONEYWELL CROSS REFERENCE	ICP CROSS REFERENCE	INTERTHERM CROSS REFERENCE	LENNOX CROSS REFERENCE	ROBERTSHAW CROSS REFERENCE	SNYDER CROSS REFERENCE	TOD CROSS REFERENCE	W-R CROSS REFERENCE
47-ICM300	3030A374	B12260-06	HQ1052757	ST74A1004,	1052757 ST74A1020 ST74A1038	6208800	33G9501	TD-10	1395-329 DT2-1000	26E-10	90-621

## ICM OEM REPLACEMENT CONTROL BOARDS

### ICM OEM REPLACEMENT CONTROL BOARDS

#### Defrost Control 47-ICM301 (Replacement for ICM, etc.)



- Low cost, time and temperature defrost
- HOLD input accumulates actual compressor run times
- Sensor input for defrost terminate
- Fixed defrost time; Pin-selectable intervals
- Test pins reduce test time by 256x

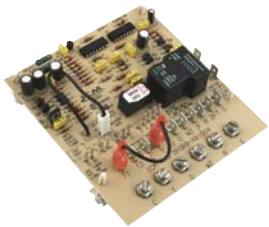


PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQUENCY (HZ)	OUTPUT FORM	CONTACT RATING NO (A)	DEFROST TIME (MINUTES)	DEFROST INTERVAL (MINUTES)	GOETTI CROSS REFERENCE	ICM CROSS REFERENCE
47-ICM301	ICM301	18-30	50,60	Relay - SPST-NO	1	10	30,60,90	305007	DFOSP24A2

#### Defrost Control 47-ICM302 (Replacement for Nordyne)



- Low cost, time and temperature defrost
- Fixed defrost time; Pin-selectable intervals
- Test pins reduce test time by 256x
- Integral short cycle protection



PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQ (HZ)	OUTPUT FORM	CONTACT RATING NO (A)	DEFROST TIME (MINUTES)	DEFROST INTERVAL (MINUTES)	ANTI-SHORT CYCLE TIME (MINUTES)	ICM CROSS REFERENCE	NORDYNE CROSS REFERENCE
47-ICM302	ICM302	18-30	50,60	Relay - SPST-NO	1	10	30,60,90	5	DFORB-AB1004	621301A,621579B 621579C,917178

#### Defrost Control ICM303 (Replacement for York)



- Time and temperature terminate
- High/low pressure switch monitoring
- Strip heat, reversing valve outputs
- Integral short cycle protection
- High power condenser relay output



PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQUENCY (HZ)	DEFROST TIME (MINUTES)	DEFROST INTERVAL (MINUTES)	GOETTI CROSS REFERENCE	ICM CROSS REFERENCE	YORK CROSS REFERENCE
ICM303	ICM303	18-30	50,60	10	30,60,90	9218-374	DFORF	03101251000, 9218-3741

#### Defrost Control ICM304 (Replacement for ICP)



- Sensor input for defrost terminate
- Time and temperature terminate
- On-board test pins reduce test time by 256x
- Integral short cycle protection
- Input accumulates actual compressor run time



PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQUENCY (HZ)	DEFROST TIME (MINUTES)	DEFROST INTERVAL (MINUTES)	ICP CROSS REFERENCE
ICM304	ICM304	18-30	50,60	10	30,60,90	1069364

#### Defrost Control 47-ICM307 (Replacement for Lennox, Ranco)



- Low cost, time and temperature defrost
- HOLD input tracks compressor run times
- Fixed defrost time; Pin-selectable intervals
- Test pins reduce test time by 256x
- Integral short cycle protection



PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQ (HZ)	OUTPUT FORM	CONTACT RATING NO (A)	DEFROST TIME (MINUTES)	DEFROST INTERVAL (MINUTES)	ANTI-SHORT CYCLE TIME (MINUTES)	FAST CROSS REFERENCE	LENNOX CROSS REFERENCE	RANCO CROSS REFERENCE
47-ICM307	ICM307	18-30	50,60	Relay - SPST-NO	1	10	30,60,90	3	1093410	86G16	DT2

#### Defrost Control 47-ICM315 (Replacement for Ranco)



- Solid state replacement for Ranco E-15
- Reliable thermistor-type sensor is less susceptible to breakage, easier to mount
- Fixed defrost time; Pin-selectable intervals
- Test pins reduce test time by 256x



PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQ (HZ)	OUTPUT FORM	CONTACT RATING NO (A)	CONTACT RATING NC (A)	DEFROST TIME (MINUTES)	DEFROST INTERVAL (MINUTES)	AVION CROSS REFERENCE	RANCO CROSS REFERENCE
47-ICM315	ICM315	24,120,230	50,60	Relay - SPST-NO	20	10	10	30,45,90	DFT100	E-15

# ICM OEM REPLACEMENT CONTROL BOARDS

## ICM OEM REPLACEMENT CONTROL BOARDS

### Defrost Control 47-ICM318 (Replacement for Goodman)



- Direct replacement for Goodman B1226008
- Low cost, time and temperature defrost
- HOLD input tracks compressor run times
- Test pins reduce test time by 256x
- Fixed defrost time; Pin-selectable intervals



PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQ (HZ)	CONTACT RATING MOTOR (V)	CONTACT RATING MOTOR (HP)	CONTACT RATING STRIP HEAT REV VALVE (V)	CONTACT RATING STRIP HEAT REV VALVE (A)	DEFROST TIME (MINUTES)	DEFROST INTERVAL (MINUTES)	GOODMAN CROSS REFERENCE	ICM CROSS REFERENCE
47-ICM318	ICM318	18-30	50,60	230	1/2	24	1	10	30,60,80	B1226008	W1001-4

### Defrost Control 47-ICM319 (Replacement for Nordyne)



- Low cost, time and temperature defrost
- Recycle function melts frost on coils
- Fixed defrost time; Pin-selectable intervals
- Test pins reduce test time by 256x
- Integral short cycle protection



PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQ (HZ)	CONTACT RATING MOTOR (V)	CONTACT RATING MOTOR (HP)	CONTACT RATING STRIP HEAT REV VALVE (V)	CONTACT RATING STRIP HEAT REV VALVE (A)	DEFROST TIME (MINUTES)	DEFROST INTERVAL (MINUTES)	ICM CROSS REFERENCE	NORDYNE CROSS REFERENCE
47-ICM319	ICM319	18-30	50,60	230	1/2	24	1	10	30,60,80	DFORB24A2I300	624519A

### Defrost Control 47-ICM320 (Replacement for Carrier)



- Direct replacement for Carrier HK32FA006 and HK25SZ359A
- Low cost, time and temperature defrost
- Fixed defrost time; Pin-selectable intervals
- Test pins reduce test time by 256x



PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQ (HZ)	CONTACT RATING MOTOR (V)	CONTACT RATING MOTOR (HP)	CONTACT RATING STRIP HEAT REV VALVE (V)	CONTACT RATING STRIP HEAT REV VALVE (A)	DEFROST TIME (MINUTES)	DEFROST INTERVAL (MINUTES)	CARRIER CROSS REFERENCE
47-ICM320	ICM320	18-30	50,60	Relay - SPST-NO	2	230	1/2	10	30,50,90	HK25SZ359A HK32FA006

### Defrost Control 47-ICM321 (Replacement for Carrier)



- Low cost, time and temperature defrost
- Fixed defrost time; Pin-selectable intervals
- Test pins reduce test time by 256x
- Integral short cycle protection



PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQ (HZ)	OUTPUT FORM	CONTACT RATING NO (A)	CONTACT RATING NC (A)	DEFROST TIME (MINUTES)	DEFROST INTERVAL (MINUTES)	ANTI-SHORT CYCLE TIME (MINUTES)	CARRIER CROSS REFERENCE
47-ICM321	ICM321	18-30	50,60	Relay - SPDT-NO/NC	20	10	10	30,50,90	5	CES010063-00, CES0110063-01 CES0110063-02, CES0110063-02A CES0130024-01, 150-83-6A

### Defrost Control 47-ICM322 (Replacement for Carrier)



- Low cost, time and temperature defrost
- Fixed defrost time; Pin-selectable intervals
- Test pins reduce test time by 256x



PART NO	VENDOR PART NO	VOLTAGE (VAC)	FREQUENCY (HZ)	CONTACT RATING NO (A)	CONTACT RATING NC (A)	DEFROST TIME (MINUTES)	DEFROST INTERVAL (MINUTES)	CARRIER CROSS REFERENCE
47-ICM322	ICM322	18-30	50,60	20	10	10	30,50,90	CES0130024-00

# ICM OEM REPLACEMENT CONTROL BOARDS

## WHITE-RODGERS RESCUE OEM REPLACEMENT CONTROL BOARDS



### Universal Two-Stage HSI Integrated 3-Speed PSC Furnace Control Kit

**White-Rodgers**

The 50M51-843 is a universal replacement control for two-stage automatic gas ignition controls employing a microprocessor to continually monitor, analyze, and control the proper operation of the gas burner and inducer. The 50M51-843 controls a multiple tapped induction circulation blower. Signals interpreted during continual surveillance of the two-stage thermostat and flame sensing element initiate automatic ignition of the burner, sensing of the

flame, and system shutoff during normal operation. The control incorporates system fault analysis for quick gas flow shutoff, coupled with automatic ignition retry upon sensing a fault correction. The 50M51-843 quickly and easily replaces White-Rodgers 50M51-xxx controls.

Kit includes:

- 50M51-843 Ignition Control Module
- 21D64-2 Ignitor Kitate

PART NO	AMANA CROSS REFERENCE	AMER STAND CROSS REFERENCE	COLEMAN CROSS REFERENCE	EVCON CROSS REFERENCE	GOODMAN CROSS REFERENCE	LENNOX CROSS REFERENCE	LUXAIRE CROSS REFERENCE	TRANE CROSS REFERENCE	YORK CROSS REFERENCE
21M51U-843	50M61-288 50M61-289	50M61-495	50M51-242	50M51-242	20300001 20300003 50M61-288 50M61-289	18M3401 46M9901 50M61-120	50M51-242	50M61-495 CNT03077 X13650839010	50M51-242



### Universal Two-Stage HSI Integrated Variable Speed (ECM) Furnace Control Kit

**White-Rodgers**

The 50V51-843 is a two-stage automatic gas interrupted ignition control employing a microprocessor to continually monitor, analyze, and control the proper operation of the gas burner and inducer. The 50V51-843 provides signals for proper operation of a variable fan speed circulator blower. Signals interpreted during continual surveillance of the two-stage thermostat and flame sensing element initiate automatic ignition of the burner, sensing of the

flame, and system shutoff during normal operation. The control incorporates system fault analysis for quick gas flow shutoff, coupled with automatic ignition retry upon sensing a fault correction.

Kit includes:

- 50V51-843 Ignition Control Module
- 21D64-2 Ignitor Kit
- Set of interconnection harnesses for Goodman

PART NO	AMANA CROSS REFERENCE	AMER STAND CROSS REFERENCE	COLEMAN CROSS REFERENCE	EVCON CROSS REFERENCE	GOODMAN CROSS REFERENCE	LENNOX CROSS REFERENCE	LUXAIRE CROSS REFERENCE	THERMO PRIDE CROSS REFERENCE	TRANE CROSS REFERENCE	YORK CROSS REFERENCE
21V51U-843	20300002 20300004 20300006 50V51-288 50V51-289 50V51-290 50V61-288 50V61-289 B1809925 B1809927 B1809927S PCB00106 PCB106S PCBBF106 PCBBF106S PCBBF107S	50V51-507 50V61-507 CNT03078 D156245P01 D34142P01 X13650840010	50V51-243	50V51-243	20300002 20300004 20300006 50V51-288 50V51-289 50V51-290 50V61-288 50V61-289 B1809925 B1809927 B1809927S PCB00106 PCB106S PCBBF106 PCBBF106S PCBBF107S	18M9901 49M5901 50V61-120	50V51-243	50V61-143	50V51-507 50V61-507 CNT03078 D156245P01 D34142P01 X13650840010	50V51-243





