

1-800-GRAINGER (472-4643)



Electronic Temperature Controls

- Digital display

Johnson Controls—A421
Series controls are single-stage, electronic temperature controls with SPDT output relay. The controls feature an adjustable backlit LCD for viewing the temperature and status of other functions, and a three-button touchpad for setup and adjustment. 35LY81 comes with factory-equipped power cord. 35LY80 and 35LY86 include Off-Cycle Defrost control with adjustable defrost cycle duration and frequency. 35LY79 and 35LY85 are freecooling, duty-cycle ventilation controls.

System 350 modular units provide On/Off and proportional temperature, humidity, and pressure control, and temperature reset.

System 450 digital modular units monitor and control temperature, humidity, and pressure simultaneously. Field-configurable out-of-the-box with Ethernet, Modbus, or Standalone communications options.

Honeywell—Vertically or horizontally mount the IP65 housing. Temperature Control 2GZN7 includes Remote Sensor 2GZP4.

- Throttling range: 1° to 150°F
- Thermistor sensor: 1097 ohms PTC at 77°F, 1/4" dia. x 2"L
- NEMA enclosures have 9" leads

Ranco—Displays error codes. Keypad lockout, settings memory, and time delay on power up.

- Thermistor sensor: 1/4" dia. x 4"L
- 0 to 10V output on 32P78, 32P80, 32P83, and 32P85

Description	Switch Type	Voltage Range	Control Range	No. of Relay Inputs	No. of Relay Outputs	Full Load Amps @ 120VAC	Full Load Amps @ 240VAC	Encl. Type	Mfr. Model	Item No.
Johnson Controls - A421										
Temp. Control, 6 1/2 ft Sensor Lead	SPDT	120/240V AC	-40° to 212°F	1	1	16 A	8 A	NEMA 1	A421ABC-02C	35LY75
Temp. Control, 9 3/4 ft Sensor Lead	SPDT	120/240V AC	-40° to 212°F	1	1	16 A	8 A	NEMA 1	A421ABC-03C	35LY76
Temp. Control, 13 ft Sensor Lead	SPDT	120/240V AC	-40° to 212°F	1	1	16 A	8 A	NEMA 1	A421ABC-04C	35LY77
Temp. Control, 19 1/2 ft Sensor Lead	SPDT	120/240V AC	-40° to 212°F	1	1	16 A	8 A	NEMA 1	A421ABC-06C	35LY78
Defrost Control, 6 1/2 ft Sensor Lead	SPDT	120/240V AC	-40° to 212°F	1	1	16 A	8 A	NEMA 1	A421ABD-02C	35LY80
Temp. Control, 6 1/2 ft Sensor Lead, 6 ft Plug	SPDT	120/240V AC	-40° to 212°F	1	1	16 A	8 A	NEMA 1	A421ABG-02C	35LY81
Cycle Timer, 6 1/2 ft Sensor Lead	SPDT	120/240V AC	-40° to 212°F	1	1	16 A	8 A	NEMA 1	A421ABT-02C	35LY79
Temp. Control, 9 3/4 in Sensor Lead	SPDT	120/240V AC	-40° to 212°F	1	1	16 A	8 A	NEMA 4X	A421AEC-01C	35LY83
Temp. Control, 6 1/2 ft Sensor Lead	SPDT	120/240V AC	-40° to 212°F	1	1	16 A	8 A	NEMA 4X	A421AEC-02C	35LY84
Defrost Control, 9 3/4 in Sensor Lead	SPDT	120/240V AC	-40° to 212°F	1	1	16 A	8 A	NEMA 4X	A421AED-01C	35LY86
Cycle Timer, 9 3/4 in Sensor Lead	SPDT	120/240V AC	-40° to 212°F	1	1	16 A	8 A	NEMA 4X	A421AED-02C	35LY82
Temp. Control, 6 1/2 ft Sensor Lead	SPDT	24V AC	-40° to 212°F	1	1	16 A	8 A	NEMA 1	A421GEF-01C	35LY88
Temp. Control, 9 3/4 in Sensor Lead	SPDT	24V AC	-40° to 212°F	1	1	16 A	8 A	NEMA 4X	A421GEF-01C	35LY88
Temp. Control, 6 1/2 ft Sensor Lead	SPDT	24V AC	-40° to 212°F	1	1	16 A	8 A	NEMA 4X	A421GEF-02C	35LY89
Johnson Controls - System 350™										
Temp. Control	SPDT	20/30V AC	-30° to 212°F	1	1	9.8 A	4.9 A	NEMA 1	A350AA-1C	36P544
Temp. Control	SPDT	20/30V AC	90° to 250°F	1	1	9.8 A	4.9 A	NEMA 1	A350AA-2C	36P545
Temp. Control	SPDT	24/27/7VAC	-35 to 55 °F	0	0	15 A	4.9 A	NEMA 1	A350BA-1C	20XJ47
Temp. Control	—	20/30V AC	-30° to 130° F	1	1	—	—	NEMA 1	A350PS-1C	36P546
Temp. Control	—	20/30V AC	90° to 250°F	1	1	—	—	NEMA 1	A350PS-2C	36P547
Temp. Control	SPDT	20/30V AC	-30° to 212°F	1	1	—	—	NEMA 1	A350RS-1C	36P548
Temp. Display Module	—	—	—	—	—	—	—	NEMA 1	D350AA-1C	36P576
Humidity Display Module	—	24VAC	—	—	—	—	—	NEMA 1	D351AA-1C	36P577
Temp. Stage Module	—	—	—	—	—	—	—	—	S350AA-1C	36P592
Temp. Stage Module	SPDT	24/240VAC	-34 to 66 °F	0	0	15A	4.9A	NEMA 1	S350AB-1C	20XJ71
Pressure Stage Module	SPDT	24/240VAC	—	0	1	9.8A	4.9A	NEMA 1	S352AA-2C	20XJ75
Humidity Control	SPDT	120/240VAC	—	1	1	9.8A	4.9A	NEMA 1	W351AB-2C	20XJ85
Power Module	—	120/240VAC	—	—	—	15A	—	NEMA 1	Y350R-1C	36P687
Johnson Controls - System 450™										
Control Module	—	24/240VAC	-50° to 360°F	3	0	—	—	NEMA 1	C450CEN-1C	30KA32
Refrigeration Control	SPDT	20/30V AC	-40 to 150 °F	0	0	9.8A	4.9A	NEMA 1	C450RBN-3C	20XJ51
Control Module	SPDT	0/5VAC	-40° to 250°F	3	2	9.8A	4.9A	NEMA 1	C450RCN-3C	12Y966
Refrigeration Control	—	—	-40 to 150 °F	—	0	—	—	NEMA 1	C450SPN-1C	20XJ52
Refrigeration Control	—	—	-40 to 150 °F	—	0	—	—	NEMA 1	C450SON-1C	20XJ53
Power Module	—	120/240V AC	—	—	—	15A	—	NEMA 1	C450YNN-1C	12Y967
Johnson Controls Accessories										
Humidity Sensor, Duct, For Use with System 350™ & System 450™	—	—	—	—	—	—	—	—	HE-69S30NP-0	12Y970
Temp. Sensor, Shielded PVC Cable, 78 in L, -40 to 212°F, For Use with System 350™, System 450™, A419	—	—	—	—	—	—	—	—	A998A-200C	36P556
Temp. Sensor, PVC Cable, 9 3/4 in L, -40 to 212°F, For Use with System 350™, System 450™, A419	—	—	—	—	—	—	—	—	A998B-25C	36P557
Temp. Sensor, PVC Cable, 78 L, -40 to 212°F, For Use with System 350™, System 450™, A419	—	—	—	—	—	—	—	—	A998B-200C	12Y968
Temp. Sensor, PVC Cable, 108 in L, -40 to 212°F, For Use with System 350™, System 450™, A419	—	—	—	—	—	—	—	—	A998B-300C	36P558
Temp. Sensor, PVC Cable, 228 in L, -40 to 212°F, For Use with System 350™, System 450™, A419	—	—	—	—	—	—	—	—	A998B-600C	36P559
Temp. Sensor, High Temp. Silicon Cable, 9 3/4 in L, -40 to 248°F, For Use with System 350™, System 450™, A419	—	—	—	—	—	—	—	—	A998C-25C	36P560
Temp. Sensor, High Temp. Silicon Cable, 108 in L, -40 to 248°F, For Use With System 350™, System 450™	—	—	—	—	—	—	—	—	A998C-300C	36P561
Wall Temp. Sensor, For Use with System 450™	—	—	—	—	—	—	—	—	TE-68NT-0000S	36P667
Temp. Stage Module	—	—	—	—	—	—	—	—	S350C-1C	20XJ72
Temp. Sensor, For Use With System 350™, System 450™	—	—	—	—	—	—	—	—	A998B-500C	20RG57
Honeywell										
Temp. Control	2 SPDT	24/240V AC	-40° to 248°F	2	2	9.8 A	4.9 A	NEMA 1	T775M2048	278Y45
Temp. Control	2 SPDT	24/240V AC	-40° to 248°F	2	2	9.8 A	4.9 A	NEMA 1	T775U2006	278Y47
Temp. Control	4 SPDT	24/240V AC	-40° to 248°F	2	4	9.8 A	4.9 A	NEMA 4X	T775B2024	2GZM7
Temp. Control	2 SPDT	24/240V AC	-40° to 248°F	2	2	9.8 A	4.9 A	NEMA 1	T775B2032	278Y44
Temp. Control	4 SPDT	24/240V AC	-40° to 248°F	2	4	9.8 A	4.9 A	NEMA 1	T775B2040	278Y46
Temp. Control	SPDT	24/240V AC	-40° to 248°F	1	1	9.8 A	4.9 A	NEMA 1	T775A2009	2GZM9
Temp. Control, Boiler Reset	4 SPDT	24/240V AC	-40° to 248°F	3	4	9.8 A	4.9 A	NEMA 1	T775P2003	2GZP2
Honeywell Accessories										
Remote Sensor, Outdoor, For Use With T775 Series 2	—	—	—	—	—	—	—	—	T775-SENS-OAT	279A42
Remote Sensor, Standard, For Use With T775 Series 2	—	—	—	—	—	—	—	—	50021579-001	279A37
Remote Sensor, Strap-on, For Use With T775 Series 2	—	—	—	—	—	—	—	—	T775-SENS-STRAP	279A44
Remote Sensor, Water Resistant, For Use With T775 Series 2	—	—	—	—	—	—	—	—	T775-SENS-WR	279A38
Remote Sensor, Water-Tight, For Use With T775 Series 2	—	—	—	—	—	—	—	—	T775-SENS-WT	279A39
Emerson										
Temp. Control	SPDT	24/240V AC	-40° to 220°F	1	1	16 A	8 A	NEMA 1	16E09-101	44R204
Ranco										
Temp. Control	SPDT	120/208/240V AC	-30° to 220°F	1	1	5.8A (NC), 2.9A (NC), 16A (NO), 8A (NO)	—	NEMA 1	ETC-111000-000	32P77 *
Temp. Control	SPDT	120/208/240V AC	-30° to 220°F	1	1	5.8A (NC), 2.9A (NC), 16A (NO), 8A (NO)	—	NEMA 1	ETC-111100-000	32P78
Temp. Control	SPDT	24V AC	-30° to 220°F	1	1	5.8A (NC), 2.9A (NC), 16A (NO), 8A (NO)	—	NEMA 1	ETC-112000-000	32P79 *
Temp. Control	SPDT	24V AC	-30° to 220°F	1	1	5.8A (NC), 2.9A (NC), 16A (NO), 8A (NO)	—	NEMA 1	ETC-112100-000	32P80
Temp. Control	SPDT	120/208/240V AC	-30° to 220°F	1	1	5.8A (NC), 2.9A (NC), 16A (NO), 8A (NO)	—	NEMA 4X	ETC-141000-000	32P81 *
Temp. Control	2 SPDT	120/208/240V AC	-30° to 220°F	1	2	5.8A (NC), 2.9A (NC), 9.8A (NO), 4.9A (NO)	—	NEMA 1	ETC-211000-000	32P82 *
Temp. Control	2 SPDT	120/208/240V AC	-30° to 220°F	1	2	5.8A (NC), 2.9A (NC), 9.8A (NO), 4.9A (NO)	—	NEMA 1	ETC-211100-000	32P83
Temp. Control	2 SPDT	24V AC	-30° to 220°F	1	2	5.8A (NC), 2.9A (NC), 9.8A (NO), 4.9A (NO)	—	NEMA 1	ETC-212000-000	32P84 *
Temp. Control	2 SPDT	24V AC	-30° to 220°F	1	2	5.8A (NC), 2.9A (NC), 9.8A (NO), 4.9A (NO)	—	NEMA 1	ETC-212100-000	32P85
Temp. Control	2 SPDT	120/208/240V AC	-30° to 220°F	1	2	5.8A (NC), 2.9A (NC), 9.8A (NO), 4.9A (NO)	—	NEMA 4X	ETC-241000-000	32P86 *
Ranco Accessories										
Temp. Sensor, -30°F to 220°F, For Use With Ranco ETC Series Controls	—	—	—	—	—	—	—	—	1309007-044	44C531
RAYCHEM										
Thermostat, Electronic, Ambient, Pipe, or Slab-Sensing	—	—	—	—	—	—	—	—	EC-TS	45RK49

* Item does not have 0 to 10V signal output.