



Application Selection and Cross-Reference Guide

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The Universal Choice

Honeywell offers a complete range of relays, contactors and transformers for all your residential and commercial HVAC applications. For reliability, safety and easy installation, Honeywell is the only brand you need.

R24 Series Electric Heat Sequencers



The positive temperature coefficient (PTC) heater element provides voltage compression over a wide voltage range without danger of over-heating at high voltage. It is self-current limiting, and assures device actuation under low-voltage conditions. The PTC has the unique feature of always stabilizing at a specific temperature, regardless of ambient temperature or voltage. This will allow the use of a common device over a wide voltage range.

Electric Heat Sequencers													
Product #	Switches	Timings	Timings — ON					Timings — OFF					
			M1-M2	M3-M4	M5-M6	M7-M8	M9-M10	M1-M2	M3-M4	M5-M6	M7-M8	M9-M10	
R24AA1008	1	1	1-20						40-110				
R24AA3004	1	1			30-90						1-30		
R24BA1006	2	1	1-20	1-20					40-110	40-110			
R24BA3002	2	1			30-90	30-90					1-30	1-30	
R24CB4007	3	2	1-110	1-110	1-110				1-110	1-110	1-110		
R24DB4005	4	2	1-110	1-110	1-110	1-110			1-110	1-110	1-110	1-110	
R24ED5007	5	4	1-160	1-160	1-160	1-160	1-160	1-160	1-160	1-160	1-160	1-160	1-160
R24AA3429 Canada	1	1	15-35						25-55				

Heat Pump — Air Handler Model				
Model #	Switches	Timings	Heat	Cool
R24AA2006	1	1	1-60	75-95

Temperature:	-50° F to 165° F	Table Notes: <ul style="list-style-type: none"> • M1-M2 and M3-M4 are always first switches to turn ON and last to turn OFF. All other switches are random ON and random OFF. • R24ED5007 Switch contacts designated F1-F2 instead of M1-M2. • R24BB3428 is Double Pole Double Throw model. • R24AA2006 is a Single Pole Double Throw model for Heat Pump Applications. • These contacts switch simultaneously. ON Time: Elapsed time (min. to max.) to make contact after heater is energized. OFF Time: Elapsed time (min. to max.) to break contact after heater is de energized.
Terminations:	Solder or screw type 1/4" quick connect	
Ratings:	Estimate — 25 A resistive and 14 A inductive at 120 Vac	
SPST:	Single Pole Single Throw	
DPST:	Double Pole Single Throw	
SPDT:	Single Pole Double Throw	
DPDT:	Double Pole Double Throw	
Agency:	UL/CSA	

Transformers



Honeywell offers NEMA — National Electrical Manufacturers Association — standard DC20-1992 and general purpose transformers. These transformers are available with single or multiple input voltages and with foot, conduit and plate mounting options. Transformers with circuit breakers that can be manually reset by pressing a button are also available. Honeywell also designs transformers for specific environmental requirements and with specialized termination options.

- NEMA-compliant transformers prevent overcooling, brownout, and burnout.

Universal Transformers									
Electrical Ratings (VA)	Electrical Ratings (Input Voltage)	Product Number	NEMA Rated	Mounting	Main Connections	Secondary Connections	Frequency	Dimensions (in.) H x W x D	NOTES
40 VA	208/240 Vac	AT72D1733	Yes	M	L	S	A	3 7/32 x 2 7/32 x 3 1/16	Only in Canada
50 VA	120/208/240 Vac	AT87A1106	Yes	M	L	S	A	2 15/16 x 2 7/32 x 2 1/4	Built-in protection; Primary winding burnout
20 VA	120/208/240 Vac	AT120A1004	No	M	L	S	B	2 7/8 x 1 7/8 x 2 15/16	Metal end bells
40 VA	120/208/240 Vac	AT140A1018	No	M	L	S	B	3 3/16 x 2 3/8 x 3 1/8	Metal end bells
75 VA	120/208/240 Vac	AT175A1008	No	M	L	S	B	3 3/16 x 2 3/8 x 3 5/8	Metal end bells
Transformers									
19 VA	120 Vac	AT20A1123	Yes	F	L	L	A	2 x 2 1/4 x 1 7/8	
40 VA	120 Vac	AT72D1006		P		S		3 7/32 x 2 7/32 x (1 1/16 into x 2 in. above plate)	
		AT72D1089		F		S		3 7/32 x 2 7/32 x 3 1/16	
		AT72D1188		P		L		3 7/32 x 2 7/32 x 2 15/16	
		AT72D1683		M		S			
		AT72D1956		M		L		3 7/32 x 2 7/32 x 3 1/16	Only in Canada
	208/240 Vac	AT72D1691	M		S				
48 VA	277 Vac	AT87A1189	F		L	2 15/16 x 2 7/32 x 2 1/4	Energy limiting overload protection		
	480 Vac	AT87A1155	F		L		Energy limiting overload protection		
20 VA	120 Vac	AT120B1028	No	F		L	B	1 11/16 x 3 3/16 x 1 3/4	Metal end bells
40 VA	120 Vac	AT140A1000		M		S		3 3/16 x 2 3/8 x 3 1/8	Metal end bells
		AT140B1206		F		L		1 11/16 x 3 1/2 x 1 3/4	Plastic end caps
		AT140B1214		F		L		1 11/16 x 3 1/2 x 1 3/4	Plastic end caps
50 VA	120/208/240 Vac	AT150A1007		M	L	S		1 11/16 x 3 3/16 x 1 3/4	Metal end bells
		AT150F1022		M		L		3 3/16 x 2 3/16 x 3 5/8	Button for resetting circuit breaker & metal end bells
		AT150F1030		M		L	3 3/16 x 2 3/16 x 3 5/8	Button for resetting circuit breaker & metal end bells	
	277 Vac	AT150B1252		F	L, Q	L, Q	A	1 11/16 x 3 1/2 x 1 3/4	Plastic end caps
75 VA	120/208/240 Vac	AT175F1023		M	L	L	B	3 3/16 x 2 3/16 x 3 15/16	Button for resetting circuit breaker & metal end bells
		AT175F1031		M		L		3 3/16 x 2 3/16 x 3 15/16	Button for resetting circuit breaker & metal end bells
	120 Vac	AT88A1005		F		L	A	2 15/16 x 2 3/16 x 3 5/16	Internally fused secondary for overload protection
	208/240 Vac	AT88A1021		F		L			
	480 Vac	AT88A1047	F	L					

Frequency:	A — 60 Hz/50 Hz; B — 60 Hz;
Mounting:	C — Conduit ; F — Foot; P — Plate; M — Foot, Conduit, Plate (F models do not come with plate options)
Connections:	L — Leadwires (9 in. to 13 in.); Q — Quick Connects; S — Screw Terminals
Approval:	UL, CSA

Relays



Honeywell's switching relays are available in multiple configurations for various applications. For whatever you need — general purpose relays or electric heat relays — Honeywell has you covered.

- **General Purpose and Heavy-Duty Switching Relays** — R4222, R8222, R4228 and R8228 for use in refrigeration and air-conditioning equipment, appliances and vending machines
- **Time Delay Relay** — ST82 combines the R8222 or R8228 relay for use in compressor-run air conditioning and heat pump systems; this product features an electronic timer that delays blower shut off after the compressor has shut off.
- **Fully Enclosed Line and Low-Voltage Fan Relays** — R4225 and R8225 for control of line voltage fan motors and auxiliary circuits.



- **Electromechanical relays for conventional 24 V thermostats**
 - RC840 for use with two or three-wire thermostats to control baseboard, convectors, radiant ceiling and duct heaters
 - Immediate relay activation, improved temperature control and comfort, no 90-second on/off delays as with thermal relays.
 - Epoxy soundproofing, quiet operation.
 - Terminal board connection, easier installation uses less space.
- **Triac relay for pulsed output thermostats**
 - RT850 for use with two or three-wire thermostats to control baseboard, convectors, radiant ceiling and duct heaters
 - Superior temperature control when used with fast cycling thermostats
 - 100% silent solid state relay switching

Relays								
Input Voltage/ Coil Voltage	Switching	Product Number	Full Load Amp Rating	Frequency	Dimensions (in.) H x W x D	Electrical Connections (main)	Special Features	
24 Vac	DPST N.O.	R8228D1018	5.5	A	1 7/8 x 2 5/32 x 2 3/8	Q		
24 Vac	DPDT (1 P & 1 P Duty)	R8222V1003	12				2 7/32 x 2 1/16 x 2 9/16	Pilot duty
	DPDT — Pilot Duty	R8222N1011						80 sec shut off delay
	DPDT	R8222D1014						
	SPDT	R8222B1067						
120 Vac	DPDT — Pilot Duty	R4222N1002			1 7/8 x 2 5/32 x 2 3/8			
	DPDT	R4222D1013						
	SPDT	R4222B1082						
208/240 Vac	DPDT	R4222D1021						
24 Vac	SPDT	R8225A1017			14		B	2 11/16 x 2 1/2 x 3 7/16
	DPST N.O.	R8225D1003						
120 Vac	SPDT, 1 N.O., 1 N.C.	R4225A1008						
24 Vac	SPDT	R8228B1012	18	A	1 7/8 x 2 5/32 x 2 3/8	Q		
Electric Heat Relays								
24 Vac	DPST	R8229A1005	7	B	2 3/16 x 2 3/32 x 2 1/4	CHS		
		R8229A1021					Extra mounting hardware	
Electric Furnace Sequencer								
24 Vac		R8330D1039	7.2	B	3 1/16 x 4 13/16 x 2 11/32	T		
Electric Heat Contactor								
24 Vac	DPST	R8246A1038	30		2 3/16 x 2 1/4 x 3 5/16	Q, S		

Frequency:	A — 60 Hz/50 Hz; B — 60 Hz, C — 50 Hz	SPST:	Single Pole Single Throw
Approvals:	UL, CSA	DPST:	Double Pole Single Throw
Temp Rating:	-20° F to +150° F; 115° F max for R8225	DPDT:	Double Pole Double Throw
Connectors:	CHS — Combination Head Screw; L — Leadwires; Q — Quick connect; T — Terminals	SPDT:	Single Pole Double Throw

Aube Electric Heat Relays							
Product Number	Input Voltage/ Coil Voltage	Switching	Full Load Amp Rating	Frequency	Dimensions (in.) H x W x D	Electrical Connections (main)	Special Features
RC840	24 Vac	SPST	16 @ 120 Vac 13 @ 208 Vac 12 @ 240 Vac	B	2 11/16 x 3 21/64 x 1 27/64	L	22 A Resistive @ 120/208/240 Vac 19 A Resistive @ 277 Vac 18 A Resistive @ 347 Vac Requires transformer
RC840T-120			16 @ 120Vac		2 45/64 x 3 11/32 x 1 27/64		22 A Resistive @ 120 Vac: Integrated transformer
RC840T-240			13 @ 208 Vac 12 @ 240 Vac				22 A Resistive @ 208/240 Vac: Integrated transformer
RC840T-277							19 A Resistive @ 277 Vac: Integrated transformer
RC840T-347							18 A Resistive @ 347 Vac: Integrated transformer
RT850	24 Vac 4-32 Vdc	SPST (Solid state relay)	N/A	B	4 13/64 x 4 11/64 x 1 57/64	L	23 A Resistive @ 120/208/277/347 Vac Guaranteed OFF signal: 5 Vac, 2 Vdc
RT850T-240	24 Vac						23 A Resistive @ 208/240 Vac: Integrated transformer Guaranteed OFF signal: 5 Vac
RT850T-347							23 A @ 347 Vac: Integrated transformer Guaranteed OFF signal: 5 Vac

Frequency:	A — 60 Hz/50 Hz; B — 60 Hz, C — 50 Hz	SPST:	Single Pole Single Throw
Approvals:	UL, CSA	DPST:	Double Pole Single Throw
Temp Rating:	-20° F to +150° F; 115° F max for R8225	DPDT:	Double Pole Double Throw
Connectors:	CHS — Combination Head Screw; L — Leadwires; Q — Quick connect; T — Terminals	SPDT:	Single Pole Double Throw

Contactors



Honeywell offers definite-purpose contactors for heating, cooling and refrigeration applications.

- Available in 1, 2, 3 and 4 pole configurations.
- Multiple input voltage range from 24/120/208/240 configurations.
- Available in 25, 30, 40, 50, 60, 75 and 90 Amp configurations.
- Meet ARI 780, UL, and CUR (file #222994) standards.
- Quick connects for coil termination.
- Compatible with most competitive models.

Cross Reference Information

Economy Contactors						Cross Reference Information							
Poles	Contact Ratings (AFL @ 240, 277, 480, 600 Vac)	Input Voltage/Coil Voltage	Product Number	Dimensions (in.) H x W x D	Main Connections	Coil Connections	Contact Ratings (Resistive @ 240, 277, 480, 600 Vac)	Honeywell	Cutler Hammer	Furnas	Mars		
1 with shunt	30	24 Vac	DP1030A1001	2 7/32 x 2 1/2 x 3 5/16	Screw Terminal	Q	48 A	DP1030A1000	C25CNB130T	45EG10AJA	91320, 17311		
2	30	24 Vac	DP2030A1004	3 1/4 x 3 5/8 x 3 7/8			48 A	DP2030A1003	C25BNB230T	45EG20AJ	61354, 17321		
		120 Vac	DP2030B1003	2 7/32 x 3 5/16 x 2 5/32			40 A	DP2030B1002	C25BNB230A	45EG20AF	61346, 17322		
		208/240 Vac	DP2030C1002	2 7/32 x 2 1/2 x 3 5/16			40 A	DP2030C1001	C25BNB230B	45EG20AG	61347, 17323		
	40	24 Vac	DP2040A1003	2 3/8 x 3 5/16 x 2			50 A	DP2040A1002	C25BNB240T	45GG20AJ	61355, 17421		
		120 Vac	DP2040B1002				50 A	DP2040B1001	C25BNB240A	45GG20AF	61356, 17422		
		208/240 Vac	DP2040C1001				50 A	DP2040C1000	C25BNB240B	45GG20AG	61357, 17423		
PowerPRO Contactors — ARI 780/790 Rated													
1 with shunt	25	24 Vac	DP1025A5006	2 7/32 x 2 1/2 x 3 5/16			Box Lug	Q	30 A	DP1025A5005	Not Available	45DG10AJA	61315
	30		DP1030A5014	2 7/32 x 2 1/2 x 3 5/16					48 A	DP1030A5013	Not Available	45EG10AJA	13101, 61320, 61720
	40		DP1040A5005	2 23/64 x 2 1/2 x 3 5/16	50 A	DP1040A5004			Not Available	45GG10AJA	61330		
2	20	24 Vac	DP2020A5022	2 7/32 x 2 1/2 x 3 5/16	30 A	DP2020A5021			Not Available	45CG20AJ	61310		
		120 Vac	DP2020B5039	2 7/32 x 2 1/2 x 3 5/16	30 A	DP2020B5038			Not Available	45CG20AF	61336, 14122		
	30	24 Vac	DP2030A5005	3 1/4 x 2 5/8 x 3 3/4	48 A	DP2030A5004			C25DND230T	45EG20AJ	61345, 13104, 91321, 60510		
		24 Vac	DP2030A5013	3 1/4 x 2 5/8 x 3 3/4		DP2030A5012			60510				
		120 Vac	DP2030B5004	2 7/32 x 3 5/16 x 2 5/32		DP2030B5003			C25DND230A	45EG20AF	61346, 13105,		
		120 Vac	DP2030B5012	2 5/16 x 3 5/16 x 2 5/32		DP2030B5011			Not Available	60031			
		208/240 Vac	DP2030C5003	2 7/32 x 2 1/2 x 3 5/16		DP2030C5002			C25DND230B	45EG20AG	61347, 13106, 60512, 60032		
		208/240 Vac	DP2030C5011			DP2030C5010	Not Available	60512 91323					
	40	24 Vac	DP2040A5004	2 23/64 x 3 3/16 x 1 15/16		DP2030D5001	Not Available	60153					
		120 Vac	DP2040B5003			50 A	DP2040A5003	C25DNF240T	45GG20AJ	13107, 91421, 61355, 61755, 60525,			
208/240 Vac		DP2040C5002	DP2040B5002				C25DNF240A	45GG20AF	13108, 91422, 61356, 61756,				
30	24 Vac	DP3030A5004	3 7/64 x 3 5/8 x 2 13/32	DP2040C5001			C25DNF240B	45GG20AG	13109, 91423, 61357, 61757, 60527, 14423				
	120 Vac	DP3030B5003		DP3030A5003	C25DND330T		42BF35AJ	61430, 13113, 60515, 13007, 91331					
	208/240 Vac	DP3030C5002		DP3030B5002	C25DND330A		42BF35AF	61431, 13114, 91332					
	40	24 Vac		DP3040A5003	50 A		DP3030C5001	C25DND330B	42BF35AG	61432, 13115, 91333, 60517, 13009			
		120 Vac		DP3040B5002			DP3040A5002	C25DNF340T	42CF35AJ	60530, 61445, 13013 91431			
		208/240 Vac		DP3040C5001			DP3040B5001	C25DNF340A	42CF35AF	61446			
50	24 Vac	DP3050A5002	3 7/64 x 3 5/8 x 2 13/32	DP3040C5000			C25DNF340B	42CF35AG	60532, 60182, 61447, 13015, 91433				
	120 Vac	DP3050B5001		DP3050A5001			C25DNJ350T	42DF35AJ	61460, 13619, 91531				
	208/240 Vac	DP3050C5010		DP3050B5000		C25DNJ350A	42DF35AF	61461					
60	24 Vac	DP3060A5001		4 7/16 x 5 x 3 3/4 4 7/16 x 5 x 3 3/4 4 7/16 x 5 x 3 3/4 4 7/16 x 5 x 3 3/4 4 7/16 x 5 x 3 3/4		DP3050C5009	C25DNJ350B	42DF35AG	60217, 60202, 61462, 13621, 91533				
	120 Vac	DP3060B5010				DP3060A5000	C25FNF360T	42EF35AJ	61470 13625 91631				
	208/240 Vac	DP3060C5009				DP3060B5009	C25FNF360A	42EF35AF	61471				
75	24 Vac	DP3075A5017				2 5/8 x 3 3/4 x 3 7/64	DP3060C5008	C25FNF360B	42EF35AG	60227, 60207, 61472, 13627, 91633			
	120 Vac	DP3075B5016			DP3075A5016		C25FNF375T	42FE35AJ	60235, 61475, 13240, 91731				
	208/240 Vac	DP3075C5015			DP3075B5015		C25FNF375A	42FE35AF	60237, 61476				
90	120 Vac	DP3090B5007			4 7/16 x 5 x 3 3/4 4 7/16 x 5 x 3 3/4 4 7/16 x 5 x 3 3/4 4 7/16 x 5 x 3 3/4		DP3075C5014	C25FNF375B	42FE35AG	60245, 61477, 13242, 91733			
	208/240 Vac	DP3090C5006	DP3090B5006				C25GNF390A	42GE35AF	61491				
	24 Vac	DP4040A5002	DP3090C5005				C25GNF390B	42GE35AG	60247, 61492, 13262				
4	40	120 Vac	DP4040B5001				50 A	DP4040A5001	C25ENF440T	42CF25AJ	61450, 13016		
		208/240 Vac	DP4040C5010	DP4040B5000				C25ENF440A	42CF25AF	61451			
		208/240 Vac	DP4040C5010	DP4040C5009				C25ENF440B	42CF25AG	61452			

Auxiliary Switches

Honeywell Auxiliary Switches work Honeywell models of 3-pole contactors.

Auxiliary Switches							Cross Reference Information			
Product Number	Circuits	Configuration	Dimensions (in.) H x W x D	Contact Ratings (Resistive)	Maximum (inrush) Current at 120/240/480/600 V	Use With	Cutler-Hammer			Square D
							15-75A	15-75A with Quick Connect Terminals	90A with Quick Connect Terminals	
DP3AUX-1NO	1	Normally Open snap-on	2 26/32 x 2 17/32 x 7/16	10 A	60/30/15/12 Amps	DP3030 – DP3090 Contactors	C320KG11	C320KG1	C320DPG10	D10
DP3AUX-1NC	1	Normally Closed snap-on					C320KG12	C320KG2	C320DPG01	D01
DP3AUX-1NO-1NC	2	Normally Closed/ Normally Open snap-on					C320KG13	C320KG3	C320DPG11	D11
DP3AUX-2NO		Normally Open snap-on					C320KG14	C320KG4	C320DPG20	D20
DP3AUX-2NC		Normally Closed snap-on					C320KG15	C320KG5		NA

Fan Centers

For fan centers (relay and transformer combination), R8285 and R8239 NEMA rated units offer low-voltage control of line-voltage fan motors and auxiliary circuits in heating, cooling or air-conditioning systems.

Fan Centers									
Electrical Ratings (VA)	Electrical Ratings (Input Voltage)	Switching	Product Number	NEMA Rated	Dimensions (in.) H x W X D	Main Connections	Secondary Connections	Frequency	NOTES
40 VA	120 Vac	DPDT	R8239B1043	Yes	4 1/2 x 4 3/16 x 3 3/32	L	L	A	Super Tradeline*
		DPST	R8239D1007						Tradeline
		DPST (1 Power, 1 Pilot)	R8239D1015						Tradeline
		SPDT	R8239A1052						Super Tradeline
50 VA	120/208/240 Vac	DPDT	R8239B1076	No	4 3/16 x 4 1/2 x 2 13/16	L	L	A	Tradeline
40 VA	120 Vac	SPDT	R8285A1048						Tradeline
	120/208/240 Vac	DPDT	R8285B1053						Tradeline
50 VA	120 Vac	DPDT	R8285D5001						

Frequency:	A — 60 Hz/50 Hz; B — 60 Hz	SPST:	Single Pole Single Throw
Approvals:	UL, CSA	DPST:	Double Pole Single Throw
Temp Rating:	-20° F to +105° F	DPDT:	Double Pole Double Throw
Connectors:	L — Leadwires	SPDT:	Single Pole Double Throw
Mounting:	Standard 4 x 4 in. junction box		

* Super Tradeline models include extra hardware.

Defrost Controller

Choose the ST74 low-voltage time/temperature defrost controller for heat pumps.

- Resets the defrost cycle by remote contact closure.
- Mounts in outdoor section of heat pump.
- Utilizes special moisture barrier to protect circuitry.

Defrost Controller			
Operation	Time On	Time Off — Selectable	Product Number
Remote Contact Closure	10 min.	50/70/90 min.	ST74A1053

Learn More

For more information about Honeywell Residential Combustion products, contact your Honeywell distributor, call **1-800-328-5111** or visit **customer.honeywell.com**.

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