



Thermostatic Expansion Valves

Capacity is at ARI standard 750-70;
at 10°F liquid subcooling. Not for use
with ammonia.



1ZR4

Nom. Cap. (tons)	Connection	Connector (in.) Inlet	Equalizer Type	Mfr. Model	Item No.
Adjustable Balanced Port Expansion Valves					
R-134A Refrigerant					
1/6 to 1/4	SAE Flare Angle	1/4	1/2	Internal	C-AA-JW 1ZRE5
1/6 to 1/4	Straight Through Solder	1/4	1/2	Internal	EC-AA-JW 1ZRE6
1/2 to 1	SAE Flare Angle	3/8	1/2	Internal	CAJW 5A433
1/2 to 8	Straight Through Solder	3/8	1/2	Internal	EC-A-JW 1ZRE7
1 to 2	Angle Solder	3/8	1/2	External	SCE-B-JW 1ZRF3
1 to 2	Straight Through Solder	1/2	3/8	External	ECE-B-JW 1ZRE8
2 to 3	SAE Flare Angle	3/8	1/2	Internal	CCJW 6X237
2 to 3	SAE Flare Angle	3/8	1/2	External	CECJW 6X239
1 to 2	SAE Flare Angle	3/8	3/8	External	CEBJW 5A435
2 to 3	Straight Through Solder	1/2	7/8	External	ECE-C-JW 1ZRE9
R-134A Compact Adjustable, Non-Balanced Port					
1/4 to 1/2	SAE Flare Angle	1/4	1/2	Internal	N 1/2 JW 3A664
R-12/R-134A Compact Adjustable, Non-Balanced Port					
1 to 2	SAE Flare Angle	3/8	1/2	Internal	N2JW 6X245
R-22 Refrigerant					
1/4 to 1/2	SAE Flare Angle	1/4	1/2	Internal	CAAVX35 1H767
1/4 to 1/2	SAE Flare Angle	1/4	1/2	Internal	CAAVW 1H768
2 to 3	SAE Flare Angle	3/8	1/2	External	CEBVX100 1ZRD4
7 1/2 to 8	Straight Through Solder	3/8	7/8	External	EBSE8VX100 1ZRD5
10 to 11	Straight Through Solder	3/8	7/8	External	EBSE11VX100 1ZRD6
15	Straight Through Solder	7/8	1 1/8	External	EBSE15VX100 1ZRD7
15	Straight Through Solder	7/8	1 1/8	External	OE-15-VX100 1ZRE1
20	Straight Through Solder	7/8	1 1/8	External	OE-20-VX100 1ZRE2
30	Straight Through Solder	1 1/8	1 1/8	External	OE-30-VX100 1ZRE3
40	Straight Through Solder	1 1/8	1 1/8	External	OE-40-VX100 1ZRE4
1/2 to 1/2	Straight Through Solder	1/4	1/2	External	ECE-AA-VZ 1ZRG6
3/4 to 1 1/2	Straight Through Solder	3/8	1/2	External	ECE-A-VZ 1ZRG7
1 1/2 to 3	Straight Through Solder	3/8	1/2	External	ECE-B-VZ 1ZRG8
1/2 to 1/2	Angle Solder	1/4	1/2	External	SCE-AA-VZ 1ZRG9
3/4 to 1 1/2	Angle Solder	3/8	1/2	External	SCE-A-VZ 1ZRH1
1 1/2 to 3	Angle Solder	3/8	1/2	External	SCE-B-VZ 1ZRH2
3/4 to 1 1/2	SAE Flare Angle	1/4	1/2	External	CEAVW 4E638
1 1/2 to 3	SAE Flare Angle	3/8	1/2	External	CEBVW 4E639
3/4 to 1 1/2	SAE Flare Angle	3/8	1/2	External	CEAVX35 4E642
3/4 to 1 1/2	SAE Flare Angle	3/8	1/2	Internal	CAVW 5A440
3 to 5	SAE Flare Angle	3/8	1/2	Internal	CCVW 5A442
3 to 5	SAE Flare Angle	3/8	1/2	Internal	CCVX100 6X238
3 1/2 to 5	SAE Flare Angle	3/8	1/2	External	CECVX100 6X240
R-404A Refrigerant					
1/6 to 1/4	SAE Flare Angle	1/4	1/2	Internal	C-AA-SZ 1ZRF4
1/2 to 1	SAE Flare Angle	3/8	1/2	Internal	C-A-SZ 1ZRF5
1 to 2	SAE Flare Angle	3/8	1/2	External	CE-B-SZ 1ZRF6
2 to 3 1/2	SAE Flare Angle	3/8	1/2	External	CE-C-SZ 1ZRF7
1/6 to 1/4	Straight Through Solder	1/4	1/2	Internal	EC-AA-SZ 1ZRF8
1/2 to 1	Straight Through Solder	3/8	1/2	Internal	EC-A-SZ 1ZRF9
1 to 2	Straight Through Solder	1/2	1/2	External	ECE-B-SZ 1ZRG1
2 to 3 1/2	Straight Through Solder	3/8	1/2	External	ECE-C-SZ 1ZRG2
1 to 2	Angle Solder	3/8	1/2	External	SCE-B-SZ 1ZRG5
1/2 to 1	SAE Flare Angle	3/8	1/2	Internal	CASW 5A436
1/2 to 1	SAE Flare Angle	3/8	1/2	Internal	CASX35 5A437
2 to 3 1/2	SAE Flare Angle	3/8	1/2	Internal	CCSW 5A438
2 to 3 1/2	SAE Flare Angle	3/8	1/2	External	CECSW 5A439
R-410A Refrigerant					
5 to 8	Straight Through Solder	3/8	7/8	External	ECE-D-ZX200 11X594
8 to 12 1/2	Straight Through Solder	3/8	1 1/8	External	ECE-12.5-ZX200 11X595
12 1/2 to 15	Straight Through Solder	3/8	1 1/8	External	ECE-15-ZX200 11X596
Constant Pressure Adjustable, Non-Balanced Port, All Refrigerants					
0.88 to 4.24	SAE Flare Angle	1/4	1/2	External	A-2 4X859
0.88 to 4.24	Inlet SAE Flare Angle / Outlet (F)NPT	1/4	1/4	External	A-1 5A446



Robertshaw

Refrigeration Controls

3XL11 terminates defrost and delays the evaporator fan operation on electric heat, hot gas, and reverse cycle commercial refrigeration systems. 3XL05 and 3XL06 provide off-cycle defrost. Generally used in systems without hot gas or electric defrost.



12Z392

Type	Voltage	Control Range (°F)	Capillary Type	Capillary L (in.)	Brand	Mfr. Model	Item No.
Freezer Controls							
Constant Differential Control	24/120/240/277	-3 to 5.5	Capillary	84	Ranco	A30-301	4E048
Extra Low Temp.	120/240	-35 to 15	Capillary	72	Ranco	o10-1419	12Z392
Extra Low Temp.	120/240	-35 to 15	Capillary w/ Bulb Sensor	72	Ranco	o10-1433	12Z393
Low Temp.	120/240	-15 to 40	Capillary w/Air Coil Sensor	—	Ranco	o10-1072	12Z394
Med. Temp.	120/240	-12 to 15	Capillary w/ Bulb Sensor	47 1/4	Ranco	K500-1126-001	6KXG4
Soft Ice Cream Machine	120/240	-15 to 40	Capillary	72	Ranco	o16-588	12Z399
Refrigeration Controls							
Bulk Milk Cooler	120/240	22.5 to 47.5	Capillary w/ Bulb Sensor	72	Ranco	o16-601	12Z401
High Temp.	120/240	25 to 75	Capillary w/Air Coil Sensor	—	Ranco	o10-1802	12Z397
High Temp.	120/240	25 to 75	Capillary w/ Bulb Sensor	72	Ranco	o10-1491	12Z398
Constant Differential Control	24/120/240/277	32 to 42	Capillary	84	Ranco	A30-261	4E051
Constant Differential Control	120/240	32 to 61	Capillary	48	Ranco	A30-2210	3XL09 †
Med. Temp.	120/208/240V	19 to 38	Capillary w/ Bulb Sensor	72	Ranco	A12-1560	6KXC4
Med. Temp.	120	25 to 75	Capillary w/Air Coil Sensor	—	Ranco	O10-1418	1A005
Med. Temp.	120/240	34 to 55	Capillary w/ Bulb Sensor	47 1/4	Ranco	K500-1127-001	6KXG5
Refrigeration or Freezer Control							
Temporary Control	120/240	-5F to +38F	Capillary	9	Robertshaw	CC-1	3PE19
Refrigeration/Freezer Controls							
Constant Differential Control	24/120/240/277	3 to 43	Capillary	84	Ranco	A30-262	4E050
Med. Temp.	24	-15 to 40	Capillary w/ Bulb Sensor	72	Ranco	O10-1409	1A003
Med. Temp.	24	-2 to 38	Capillary	72	Ranco	O10-1408	1A002 *
Med. Temp.	120/240	0 to 47	Capillary w/ Bulb Sensor	47 1/4	Ranco	K500-1125-001	6KXG3
Med. Temp.	240	0 to 55	Capillary	72	Ranco	O10-1416	1A020
Med. Temp.	120	25 to 75	Capillary w/ Bulb Sensor	72	Ranco	O10-1410	1A004
Med. Temp.	120/240	0 to 55	Capillary	0 to 55	Ranco	o10-1010	12Z395
Med. Temp.	120/240	0 to 55	Capillary w/ Bulb Sensor	72	Ranco	o10-1473	12Z396
Med. Temp.	120/240	0 to 55	Capillary	72	Ranco	o16-111	12Z402
Med. Temp.	120/240	0 to 55	Capillary	72	Ranco	o16-104	12Z403
Med. Temp.	120/240	0 to 55	Capillary	96	Ranco	o16-264	12Z404
Med. Temp.	120/240	0 to 55	Capillary w/ Bulb Sensor	72	Ranco	o16-263	12Z405
Temperature and Defrost Controls							
Defrost Control	120/240	40 to 75	Cross Ambient Bulb	60	Ranco	F25-107	3XL11
Constant Cut In Cold Control	120/240	18 to 27	Capillary	84	Ranco	A12-700	3XL05
Constant Cut In Control	120/240	35 to 41	Capillary	84	Ranco	A12-701	3XL06
Water Cooler Control							
OEM Replacement	120/208/240	37 to 61	Capillary	48	Ranco	K-3001	3XL12

* Air coil. † Not adaptable; direct fit with dial shaft.