

Appendix

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Additional Information

- Copeland to Copeland Condensing Unit Cross Reference
- Tecumseh to Copeland Condensing Unit Cross Reference
- EK Filter Drier
- HMI Moisture Indicator
- HF/HFK Series Thermal Expansion Valve
- TXV Superheat Adjustment Chart
- Outdoor Hood Accessory Information
- Refrigerants and Lubricants Approved for Use in Copeland® Compressors



Copeland to Copeland condensing unit cross reference

Status	Product Number	Length (in)	Width (in)	Height (in)	Refrigerant	Application	Capacity	MCA / Fuse
Obsolete	MBFS-0017-SAA	13.8	11.1	9.7	12	HT	1090	4.2 - 15
Active	M2FH-0017-SAA	13.8	11.8	9.7	134a	HT	1150	4.3 - 15
Obsolete	MBFS-0020-SAA	13.8	11.1	9.7	12	HT	1260	5.5 - 15
Active	M2FH-0020-IAA	13.8	11.3	9.7	134a	HT	1330	5.2 - 15
Obsolete	MBFS-0024-SAA	13.8	11.8	9.7	12	HT	1730	6.3 - 15
Active	M2FH-0024-SAA	13.8	11.8	9.7	134a	HT	1810	6.3 - 15
Obsolete	MBFH-A026-IAA	13.8	11.8	9.7	12	HT	2770	6.9 - 15
Active	M2FH-0026-IAA	13.8	11.3	9.7	134a	HT	2080	6.9 - 15
Obsolete	MBFS-0033-IAA	13.8	11.8	9.7	12	HT	4080	9.7 - 15
Active	M2FH-A033-IAA	13.8	11.3	9.7	134a	HT	2620	9.9 - 15
Obsolete	MBFH-0049-IAA	16.2	13.1	11.8	12	HT	4890	12.5 - 20
Active	M2FH-0049-IAA	16.2	12.7	11.8	134a	HT	3600	12.5 - 20
Obsolete	MBFH-0050-IAA	17.9	13.1	11.8	12	HT	4030	13.8 - 20
Active	M2FH-0050-IAA	19	14.1	15	134a	HT	4230	13.6 - 20
Obsolete	FJAF-A050-IAA	16.2	13.2	11.9	404A	MT	4340	13.7 - 20
Active	M4FF-0050-IAA	16.1	13.7	11.7	404A	MT	4660	7.2 - 15
Obsolete	FJAF-A050-IAV	16.2	13.2	11.9	404A	MT	4340	7.8 - 15
Active	M4FF-0050-IAV	16.1	13.7	11.7	404A	MT	4660	7.2 - 15
Obsolete	FJAF-A056-IAA	17.5	14.3	12.1	404A	MT	5100	14.3 - 20
Active	M4FF-0056-IAA	17.4	14.4	11.8	404A	MT	5180	14.8 - 20
Obsolete	FJAF-A056-IAV	17.5	14.3	12.1	404A	MT	5630	8.1 - 15
Active	M4FF-0056-IAV	17.4	14.4	11.8	404A	MT	5350	7.6 - 15
Obsolete	FJAF-B078-CAA	24	16.9	13.1	404A	MT	6740	18.5 - 25
Active	M4FF-0075-CAA	24	17.1	13.1	404A	MT	6660	20.8 - 30
Obsolete	FJAF-B078-CAV	24	16.9	13.1	404A	MT	6740	8.8 - 15
Active	M4FF-0075-CAV	24	17.1	13.1	404A	MT	6660	9.7 - 15
Obsolete	FJAM-A106-CAV	24	18.3	16.2	404A	MT	8530	12.5 - 15
Active	FJAF-0106-CAV	24	18.3	16.1	404A	MT	8500	12.7 - 20
Obsolete	F3AD-B151-CFV	24	18.3	16.9	22	HT	11500	14.2 - 20
Active	FGAH-A151-CFV	24	18.3	16.9	22	HT	11300	14.2 - 20
Obsolete	F3AD-B151-TFC	24	18.3	16.9	22	HT	11300	10.4 - 15
Active	FGAH-A151-TFC	24	18.3	16.9	22	HT	11300	10.4 - 15
Obsolete	F3AD-B151-TFD	24	18.3	16.9	22	HT	11100	5.4 - 15
Active	FGAH-A151-TFD	24	18.3	16.9	22	HT	11300	5.4 - 15
Obsolete	F3AD-B201-CFV	25	34	19	22	HT	15400	19.2 - 30
Active	FGAH-A201-CFV	25	34	19	22	HT	15400	19.2 - 30
Obsolete	F3AD-B201-TFC	25	34	19	22	HT	15800	11.7 - 15
Active	FGAH-A201-TFC	25	34	19	22	HT	15400	11.7 - 15
Obsolete	F3AD-B201-TFD	25	34	19	22	HT	15800	6.1 - 15
Active	FGAH-A201-TFD	25	34	19	22	HT	15400	6.1 - 15
Obsolete	F3AD-B225-CFV	25.1	34.1	19	22	HT	17100	21.1 - 30
Active	FGAH-A225-CFV	25.1	34.1	19	22	HT	18100	21.1 - 30
Obsolete	F3AD-B225-TFC	25.1	34.1	19	22	HT	17100	13.3 - 15
Active	FGAH-A225-TFC	25.1	34.1	19	22	HT	18100	13.3 - 15
Obsolete	F3AD-B225-TFD	25.1	34.1	19	22	HT	17100	7.0 - 15
Active	FGAH-A225-TFD	25.1	34.1	19	22	HT	18100	7.0 - 15
Obsolete	F3AD-B301-CFV	25.2	34.1	19.1	22	HT	24600	28.9 - 40
Active	FGAH-A301-CFV	25.2	34.1	19.1	22	HT	24600	28.9 - 40
Obsolete	F3AD-B301-TFC	25.2	34.1	19.1	22	HT	24600	19.7 - 20
Active	FGAH-A301-TFC	25.2	34.1	19.1	22	HT	24600	19.7 - 20
Obsolete	F3AD-B301-TFD	25.2	34.1	19.1	22	HT	24600	10.2 - 15
Active	FGAH-A301-TFD	25.2	34.1	19.1	22	HT	24600	10.2 - 15
Obsolete	F3AD-B325-CFV	25.2	34.1	18.9	22	HT	26500	30.1 - 40
Active	FGAH-A325-CFV	25.2	34.1	18.9	22	HT	26400	30.1 - 40
Obsolete	F3AD-B325-TFC	25.2	34.1	18.9	22	HT	26500	22.2 - 25
Active	FGAH-A325-TFC	25.2	34.1	18.9	22	HT	26400	22.2 - 25
Obsolete	F3AD-B325-TFD	25.2	34.1	18.9	22	HT	26500	10.6 - 15
Active	FGAH-A325-TFD	25.2	34.1	18.9	22	HT	26400	10.6 - 15
Obsolete	F3AD-B401-TFC	28.2	44.1	26.9	22	HT	37600	26.1 - 40
Active	FGAH-A401-TFC	28.2	44.1	26.9	22	HT	37500	26.1 - 40
Obsolete	F3AD-B401-TFD	28.2	44.1	26.9	22	HT	37600	13.8 - 20
Active	FGAH-A401-TFD	28.2	44.1	26.9	22	HT	37500	13.8 - 20
Obsolete	F3AD-A501-CFV	28.6	44.1	26.9	22	HT	42700	46.4 - 70
Active	FGAH-A501-CFV	28.6	44.1	26.9	22	HT	43200	46.5 - 70

Capacity at +25° F Evap, 90° F Ambient for MT / HT Applications

Capacity at -10° F Evap, 90° F Ambient for LT Applications

Refrigerant change

Copeland to Copeland condensing unit cross reference

Status	Product Number	Length (in)	Width (in)	Height (in)	Refrigerant	Application	Capacity	MCA / Fuse
Obsolete	F3AD-A501-TFC	28.6	44.1	26.9	22	HT	42700	30.3 - 45
Active	FGAH-A501-TFC	28.6	44.1	26.9	22	HT	43200	30.4 - 45
Obsolete	F3AD-A501-TFD	28.6	44.1	26.9	22	HT	42700	14.4 - 20
Active	FGAH-A501-TFD	28.6	44.1	26.9	22	HT	43200	14.4 - 20
Obsolete	MBFL-0034-IAA	16	12.2	9.7	12	LT	1660	7.0 - 15
Active	M2FL-0040-IAA	16.5	12.4	9.7	134a	LT	1540	7.3 - 15
Obsolete	MBFL-0050-IAA	16.2	13.1	11.8	12	LT	2350	9.9 - 15
Active	FTAL-A050-IAA	16	13.1	11.9	134a	LT	2260	17.2 - 25
Obsolete	FJWM-C056-IAA	17.9	13.2	11.2	404A	MT	6000	12.6 - 20
Active	M4WF-C056-IAA	17.4	12.7	10.5	404A	MT	5890	13.1 - 20
Obsolete	FJWM-C056-IAV	17.9	13.2	11.2	404A	MT	6000	7.1 - 15
Active	M4WF-C056-IAV	17.4	12.7	10.5	404A	MT	5890	6.6 - 15
Obsolete	FJWM-C078-CAA	24	17.1	12.1	404A	MT	7930	16.5 - 25
Active	M4WF-C075-CAA	24	16.1	10.7	404A	MT	7560	18.8 - 30
Obsolete	FJWM-C078-CAV	24	17.1	12.1	404A	MT	7930	7.6 - 15
Active	M4WF-C075-CAV	24	16.1	10.7	404A	MT	7560	8.5 - 15
Obsolete	FJWM-C106-CAV	24	16.1	11.8	404A	MT	9100	9.6 - 15
Active	FJWF-C106-CAV	24.2	17.2	10.7	404A	MT	9470	11.3 - 20
Obsolete	FJWL-C075-IAV	24	16.1	11.6	404A	LT	3750	12.1 - 20
Active	M4WL-C075-IAV	24	16.4	10.7	404A	LT	4100	11.8 - 20
Obsolete	FTAH-A15Z-CFV	24	18.3	16.3	134a	HT	13100	23.8 - 40
Active	FFAS-A20Z-CFV	25.2	34	19	134a	HT	12200	21.8 - 35
Obsolete	FTAH-A15Z-TFC	24	18.3	16.3	134a	HT	13100	13.9 - 20
Active	FFAS-A20Z-TFC	25.2	34	19	134a	HT	12200	13.3 - 20
Obsolete	FTAH-A20Z-CFV	25.2	34	19	134a	HT	17000	28.1 - 45
Active	FFAS-A30Z-CFV	25.2	34	19	134a	HT	17700	28.7 - 45
Obsolete	FJAM-A20Z-CFV	25.2	34	19	404A	MT	18100	21.9 - 35
Active	FFAS-A20Z-CFV	25.2	34	19	404A	MT	17500	21.8 - 35
Obsolete	FJAM-A20Z-TFC	25.2	34	19	404A	MT	18100	13.4 - 20
Active	FFAS-A20Z-TFC	25.2	34	19	404A	MT	17500	13.3 - 20
Obsolete	FTAH-A25Z-CFV	25.2	34	19	134a	HT	19200	31.8 - 50
Active	FFAS-A30Z-CFV	25.2	34	19	134a	HT	17700	28.7 - 45
Obsolete	FTAH-A25Z-TFC	25.2	34	19	134a	HT	19200	19.7 - 30
Active	FFAS-A30Z-TFC	25.2	34	19	134a	HT	17700	17.9 - 25
Obsolete	FJAM-A25Z-CFV	25.2	34	19	404A	MT	23000	25.2 - 40
Active	FFAS-A25Z-CFV	25.2	34.1	19	404A	MT	23200	25.2 - 40
Obsolete	FJAM-A25Z-TFC	25.2	34	19	404A	MT	23000	15.3 - 20
Active	FFAS-A25Z-TFC	25.2	34.1	19	404A	MT	23200	15.3 - 20
Obsolete	FTAH-A30Z-CFV	25.2	34	19	134a	HT	23200	36.3 - 60
Active	FFAS-A40Z-CFV	28.2	44.1	26.1	134a	HT	24700	37.1 - 60
Obsolete	FTAH-A30Z-TFC	25.2	34	19	134a	HT	23200	22.4 - 35
Active	FFAS-A40Z-TFC	28.2	44.1	26.1	134a	HT	24700	23.2 - 35
Obsolete	FJAM-A30Z-CFV	25.2	34	19	404A	MT	26900	28.7 - 45
Active	FFAS-A30Z-CFV	25	34	19	404A	MT	26900	28.7 - 45
Obsolete	FJAM-A30Z-TFC	25.2	34	19	404A	MT	26900	17.9 - 25
Active	FFAS-A30Z-TFC	25	34	19	404A	MT	26900	17.9 - 25
Obsolete	FTAH-A35Z-CFV	25.2	34	19	134a	HT	27000	41.7 - 60
Active	FFAS-A50Z-CFV	28.1	44.1	26.8	134a	HT	29900	42.5 - 60
Obsolete	FTAH-A35Z-TFC	25.2	34	19	134a	HT	27000	30.4 - 45
Active	FFAS-A50Z-TFC	28.1	44.1	26.8	134a	HT	29900	31.2 - 45
Obsolete	FTAH-A35Z-TFD	25.2	34	19	134a	HT	27000	15.2 - 20
Active	FFAS-A50Z-TFD	28.1	44.1	26.8	134a	HT	29900	14.4 - 20
Obsolete	FJAM-A35Z-CFV	25.2	34	19	404A	MT	30500	32.3 - 50
Active	FFAS-A35Z-CFV	25.2	34	19	404A	MT	30400	32.3 - 50
Obsolete	FJAM-A35Z-TFC	25.2	34	19	404A	MT	30500	20.2 - 30
Active	FFAS-A35Z-TFC	25.2	34	19	404A	MT	30400	20.2 - 30
Obsolete	FTAH-A45Z-TFC	28.2	44.1	26.8	134a	HT	35000	31.7 - 50
Active	FFAS-A60Z-TFC	44.1	28.2	26.8	134a	MT	35000	31.7 - 50
Obsolete	FTAH-A45Z-TFD	28.2	44.1	26.8	134a	HT	35000	16.8 - 25
Active	FFAS-A60Z-TFD	44.1	28.2	26.8	134a	HT	35000	16.8 - 25
Obsolete	FJAM-A40Z-CFV	28.2	44.1	26.8	404A	MT	37800	37.1 - 60
Active	FFAS-A40Z-CFV	28.2	44.1	26.1	404A	MT	38100	37.1 - 60
Obsolete	FJAM-A40Z-TFC	28.2	44.1	26.8	404A	MT	37800	23.2 - 60
Active	FFAS-A40Z-TFC	28.2	44.1	26.1	404A	MT	38100	23.2 - 60

Capacity at +25° F Evap, 90° F Ambient for MT / HT Applications

Capacity at -10° F Evap, 90° F Ambient for LT Applications

Refrigerant change

Copeland to Copeland condensing unit cross reference

Status	Product Number	Length (in)	Width (in)	Height (in)	Refrigerant	Application	Capacity	MCA / Fuse
Obsolete	FTAH-A50Z-TFC	28.2	44.1	26.8	134a	HT	39200	39.4 - 60
Active	FFAS-A60Z-TFC	44.1	28.2	26.8	134a	MT	35000	31.7 - 50
Obsolete	FTAH-A50Z-TFD	28.2	44.1	26.8	134a	HT	39200	20.3 - 30
Active	FFAS-A60Z-TFD	44.1	28.2	26.8	134a	MT	35000	16.8 - 25
Obsolete	FJAM-A50Z-CFV	28.2	44.1	26.8	404A	MT	45600	42.5 - 60
Active	FFAS-A50Z-CFV	28.2	44.1	26.8	404A	MT	46100	42.5 - 60
Obsolete	FJAM-A50Z-TFC	28.2	44.1	26.8	404A	MT	45600	31.2 - 45
Active	FFAS-A50Z-TFC	28.2	44.1	26.8	404A	MT	46100	31.2 - 45
Obsolete	FJAM-A50Z-TFD	28.2	44.1	26.8	404A	MT	45600	14.4 - 20
Active	FFAS-A50Z-TFD	28.2	44.1	26.8	404A	MT	46100	14.4 - 20
Obsolete	FJAM-A60Z-TFC	28.2	44.1	26.8	404A	MT	52400	31.7 - 50
Active	FFAS-A60Z-TFC	44.1	28.2	26.8	404A	MT	53100	31.7 - 50
Obsolete	FJAM-A60Z-TFD	28.2	44.1	26.8	404A	MT	52400	16.8 - 25
Active	FFAS-A60Z-TFD	44.1	28.2	26.8	404A	MT	53100	16.8 - 25
Obsolete	M2EM-0048-IAA	16	15.1	11.8	134a	MT	3760	13.6 - 20
Active	M2EM-A048-IAA	16.5	15.1	11.8	134a	MT	3740	12.8 - 20
Obsolete	FJEF-B078-CAA	24	16.8	13.7	404A	MT	6740	18.5 - 25
Active	M4EF-0075-CAA	24	16.8	13.6	404A	MT	6620	20.8 - 30
Obsolete	FJEF-A075-IAV	24	16.1	13.7	404A	MT	7120	12.7 - 20
Active	M4EF-0080-IAV	24	16.8	13.6	404A	MT	7640	12.4 - 20
Obsolete	F3WD-C151-CFV-020	24	16.1	15	22	HT	13500	11.3 - 20
Active	FGWH-A151-CFV-020	24	16.7	14.3	22	HT	13500	11.3 - 20
Obsolete	F3WD-C151-TFC-020	24	16.1	14.2	22	HT	13500	7.5 - 15
Active	FGWH-A151-TFC-020	24	16.7	14.3	22	HT	13500	7.5 - 15
Obsolete	F3WD-C151-TFD-020	24	16.1	15.4	22	HT	13500	3.8 - 15
Active	FGWH-A151-TFD-020	24	16.7	15.4	22	HT	13500	3.8 - 15
Obsolete	F3WD-C201-CFV-020	24	16.1	15	22	HT	16900	16.9 - 30
Active	FGWH-A201-CFV-020	24	16.7	15	22	HT	16900	16.9 - 30
Obsolete	F3WD-C201-TFC-020	24	16.1	14.2	22	HT	16900	9.4 - 15
Active	FGWH-A201-TFC-020	24	16.7	14.3	22	HT	16900	9.4 - 15
Obsolete	F3WD-C201-TFD-020	24	16.1	15.4	22	HT	16900	4.6 - 15
Active	FGWH-A201-TFD-020	24	16.7	15.4	22	HT	16900	4.6 - 15
Obsolete	F3WD-C225-CFV-020	24	16.1	15	22	HT	19300	18.8 - 30
Active	FGWH-A225-CFV-020	24	16.7	15	22	HT	19300	18.8 - 30
Obsolete	F3WD-C225-TFC-020	24	16.1	14.6	22	HT	19300	11.0 - 15
Active	FGWH-A225-TFC-020	24	16.7	14.6	22	HT	19300	11.0 - 15
Obsolete	F3WD-C225-TFD-020	24	16.1	15.4	22	HT	19300	5.5 - 15
Active	FGWH-A225-TFD-020	24	16.7	15	22	HT	19300	5.5 - 15
Obsolete	F3WD-C301-CFV-020	26.2	21	15.4	22	HT	27300	23.1 - 40
Active	FGWH-A301-CFV-020	25	21	15.5	22	HT	27300	23.1 - 40
Obsolete	F3WD-C301-TFC-020	25	21	15.8	22	HT	27300	13.9 - 20
Active	FGWH-A301-TFC-020	25	21	15.8	22	HT	27300	13.9 - 20
Obsolete	F3WD-C301-TFD-020	25	21	15.8	22	HT	27300	7.0 - 15
Active	FGWH-A301-TFD-020	25	21	15.8	22	HT	27300	7.0 - 15
Obsolete	F3WD-C325-CFV-020	26.2	21	15.4	22	HT	29700	24.3 - 40
Active	FGWH-A325-CFV-020	25	21	15.5	22	HT	30200	24.3 - 40
Obsolete	F3WD-C325-TFC-020	25	21	16.1	22	HT	29700	16.4 - 25
Active	FGWH-A325-TFC-020	25	21	15.5	22	HT	30200	16.4 - 25
Obsolete	F3WD-C325-TFD-020	25	21	16.1	22	HT	29700	7.4 - 15
Active	FGWH-A325-TFD-020	25	21	15.5	22	HT	30200	7.4 - 15
Obsolete	F3WD-C401-CFV-020	26.8	21	21.1	22	HT	39400	36.3 - 60
Active	FGWH-A401-CFV-020	26.8	21	21.1	22	HT	39400	36.3 - 60
Obsolete	F3WD-C401-TFC-020	26.8	21	21.1	22	HT	39400	22.5 - 40
Active	FGWH-A401-TFC-020	26.8	21	21.1	22	HT	39400	22.5 - 40
Obsolete	F3WD-C401-TFD-020	26.8	21	21.1	22	HT	39400	11.4 - 20
Active	FGWH-A401-TFD-020	26.8	21	21.1	22	HT	39400	11.4 - 20
Obsolete	F3WD-C501-CFV-020	25.8	21.8	21.1	22	HT	45100	42.9 - 70
Active	FGWH-A501-CFV-020	25.8	21.8	21.1	22	HT	45100	42.9 - 70
Obsolete	F3WD-C501-TFC-020	25.8	21.8	21.1	22	HT	45100	26.8 - 45
Active	FGWH-A501-TFC-020	25.8	21.8	21.1	22	HT	45100	26.8 - 45
Obsolete	F3WD-C501-TFD-020	25.8	21.8	21.1	22	HT	45100	12.0 - 20
Active	FGWH-A501-TFD-020	25.8	21.8	21.1	22	HT	45100	12.0 - 20

Capacity at +25° F Evap, 90° F Ambient for MT / HT Applications Capacity at -10° F Evap, 90° F Ambient for LT Applications Refrigerant change

Tecumseh to Copeland condensing unit cross reference

Brand	Model Number	Length (in)	Width (in)	Height (in)	Refrig.	Application Evap Temp °F	Capacity Btu/Hr	MCA	Max Fuse
Tecumseh	AEA1360YXASS	16	11.5	9.9	134A	-10	610		15
Copeland	M2FL-0023-IAA-103	13.8	11.5	9.7	134A	-10	740	4.2	15
Tecumseh	AEA1360YXASS	16	11.5	9.9	134A	-10	610		15
Copeland	M2FL-0023-IAA-111	13.8	11.3	9.7	134A	-10	740	4.2	15
Tecumseh	AEA2380ZXASB	16	11.5	9.9	404A	-10	1030		15
Copeland	M4FL-0025-IAA-103	13.8	12	9.7	404A	-10	920	6.7	15
Copeland	M4FL-0025-IAA-072	14.5	12	11.4	404A	-10	920	6.7	15
Tecumseh	AEA2380ZXASB	16	11.5	9.9	404A	-10	1030		15
Copeland	M4FL-0025-IAA-103	13.8	12	9.7	404A	-10	920	6.7	15
Copeland	M4FL-0025-IAA-072	14.5	12	11.4	404A	-10	920	6.7	15
Tecumseh	AEA2410YXASB	16	11.5	9.9	134A	-10	1180		15
Copeland	M2FL-A025-IAA-103	13.8	11.8	9.7	134A	-10	1070	6.9	15
Tecumseh	AEA2410YXASB	16	11.5	9.9	134A	-10	1180		15
Copeland	M2FL-A025-IAA-103	13.8	11.8	9.7	134A	-10	1070	6.9	15
Tecumseh	AEA2411ZXASB	16	11.5	9.9	404A	-10	1340		15
Copeland	M4FL-0033-IAA-103	13.8	11.8	9.7	404A	-10	1390	7.7	15
Copeland	M4FL-0033-IAA-072	14.5	12	11.4	404A	-10	1390	7.7	15
Tecumseh	AEA2411ZXASS	16	11.5	9.9	404A	-10	1340		15
Copeland	M4FL-0033-IAA-111	13.9	11.7	9.6	404A	-10	1390	7.7	15
Copeland	M4FL-0033-IAA-072	14.5	12	11.4	404A	-10	1390	7.7	15
Tecumseh	AEA2413YXASB	16	11.5	9.9	134A	-10	1480		15
Copeland	M2FL-0040-IAA-103	16.7	12.6	9.7	134A	-10	1540	7.3	15
Tecumseh	AEA2413YXASB	16	11.5	9.9	134A	-10	1480		15
Copeland	M2FL-0040-IAA-103	16.7	12.8	9.7	134A	-10	1540	7.3	15
Tecumseh	AEA3414YXASB	16	11.5	9.9	134A	25	980		15
Copeland	M2HH-0017-SAA-102	16.5	6.6	10.8	134A	25	890	4.1	15
Copeland	M2FH-0017-IAA-103	13.8	11.9	9.7	134A	25	1150	4.3	15
Tecumseh	AEA3414YXASK	16	11.5	9.9	134A	25	980		15
Copeland	M2HH-0017-SAA-102	16.5	6.6	10.8	134A	25	890	4.1	15
Tecumseh	AEA3417YXASK	16	11.5	9.9	134A	25	1280		15
Copeland	M2FH-0020-IAA-111	13.6	11.1	9.7	134A	25	1330	5.2	15
Tecumseh	AEA3417YXASK	16	11.5	9.9	134A	25	1280		15
Copeland	M2FH-0020-IAA-111	13.6	11.8	9.7	134A	25	1330	5.2	15
Tecumseh	AEA3425YXASS	16	11.5	9.9	134A	25	1640		15
Copeland	M2FH-0024-SAA-111	13.8	11	9.7	134A	25	1810	6.3	15
Copeland	M4FH-0022-IAA-111	13.8	11.4	9.7	404A	25	1720	7.4	15
Copeland	MMFH-0022-IAA-103	13.8	11.5	9.7	22	25	1680	6.5	15
Tecumseh	AEA3425YXASS	16	11.5	9.9	134A	25	1640		15
Copeland	M2FH-0026-IAA-111	13.8	11.8	9.7	134A	25	2080	6.9	15
Copeland	M2FH-0026-IAA-072	14.5	12	11.4	134A	25	2080	6.9	15
Tecumseh	AEA4430YXASS	16	11.5	9.9	134A	25	2030		15
Copeland	M2FH-0026-IAA-111	13.8	11.8	9.7	134A	25	2080	6.9	15
Copeland	M2FH-0026-IAA-072	14.5	12	11.4	134A	25	2080	6.9	15
Tecumseh	AEA4430YXASB	16	11.5	9.9	134A	25	2030		15
Copeland	M2FH-0026-IAA-103	13.8	11.8	9.7	134A	25	2080	6.9	15
Copeland	M2FH-0026-IAA-072	14.5	12	11.4	134A	25	2080	6.9	15

Capacity at 90° F Ambient for LT / MT / HT Applications

Refrigerant change

Bold Models= Value Add Models With EK Filter Drier and HMI Moisture Indicator Sightglass

Tecumseh to Copeland condensing unit cross reference

Brand	Model Number	Length (in)	Width (in)	Height (in)	Refrig.	Application Evap Temp °F	Capacity Btu/Hr	MCA	Max Fuse
Tecumseh	AEA4440YXASK	16	11.5	9.9	134A	25	2610		15
Copeland	M2FH-A033-IAA-111	13.8	12	9.7	134A	25	2620	9.9	15
Tecumseh	AEA4440YXASB	16	11.5	9.9	134A	25	2610		15
Copeland	M2FH-A033-IAA-103	13.8	11.8	9.7	134A	25	2620	9.9	15
Copeland	M2FH-A033-IAA-272	14.5	12	11.4	134A	25	2620	9.9	15
Tecumseh	AEA4448YXASB	16	11.5	9.9	134A	25	3060		20
Copeland	M2FH-0040-IAA-212	16.3	12.5	9.7	134A	25	2870	10.2	15
Tecumseh	AEA4448YXASB	16	11.5	9.9	134A	25	3060		20
Copeland	M2FH-0040-IAA-212	16.3	12.5	9.7	134A	25	2870	10.2	15
Tecumseh	AEA9415EXASB	16	11.5	9.9	22	25	1880		15
Copeland	M2FH-0024-SAA-111	13.8	11	9.7	134A	25	1810	6.3	15
Copeland	MMFH-0022-IAA-103	13.8	11.5	9.7	22	25	1680	6.5	15
Copeland	MCFH-0027-IAA-103	13.8	11.4	9.7	22	25	2600	9.1	15
Tecumseh	AEA9415ZXASS	16	11.5	9.9	404A	25	1640		15
Copeland	M4FH-0022-IAA-111	13.8	11.4	9.7	404A	25	1720	7.4	15
Copeland	M4FH-0022-IAA-272	14.5	12.8	11.4	404A	25	1720	7.4	15
Tecumseh	AEA9415EXASB	16	11.5	9.9	22	25	1880		15
Copeland	M2FH-0024-SAA-102	13.8	11	9.7	134A	25	1810	6.3	15
Copeland	MMFH-0022-IAA-103	13.8	11.4	9.7	22	25	1680	6.5	15
Tecumseh	AEA9415ZXASS	16	11.5	9.9	404A	25	1640		15
Copeland	M4FH-0022-IAA-111	13.8	11.4	9.7	404A	25	1720	7.4	15
Copeland	M4FH-0022-IAA-272	14.46	12.8	11.36	404A	25	1720	7.4	15
Tecumseh	AEA9422EXASB	16	11.5	9.9	22	25	2680		15
Copeland	M2FH-A033-IAA-103	13.8	11.8	9.7	134A	25	2620	9.9	15
Copeland	MCFH-0027-IAA-103	13.8	11.4	9.7	22	25	2600	9.1	15
Copeland	MCFH-0027-IAA-272	14.2	12.3	11.8	22	25	2600	9.1	15
Tecumseh	AEA9422ZXASB	16	11.5	9.9	404A	25	2530		15
Copeland	M4FH-0025-IAA-103	13.8	11.4	9.7	404A	25	2430	10.7	15
Copeland	M4FH-0025-IAA-272	14.5	12	11.4	404A	25	2430	10.7	15
Tecumseh	AEA9422EXASS	16	11.5	9.9	22	25	2680		15
Copeland	MCFH-0027-IAA-111	13.8	11.2	9.7	22	25	2600	9.1	15
Copeland	MCFH-0027-IAA-272	14.1	12.3	11.2	22	25	2600	9.1	15
Tecumseh	AEA9422ZXASB	16	11.5	9.9	404A	25	2530		15
Copeland	M4FH-0025-IAA-103	13.8	11.8	9.7	404A	25	2430	10.7	15
Copeland	M4FH-0025-IAA-272	14.5	12	11.4	404A	25	2430	10.7	15

Capacity at 90° F Ambient for LT / MT / HT Applications

Bold Models= Value Add Models With EK Filter Drier and HMI Moisture Indicator Sightglass

Refrigerant change

Emerson® EK filter drier

The EK filter drier is a best-in-class Emerson® product, recommended by Emerson Climate Technologies, Inc. for use with HFC refrigerants.

For more information about the EK filter drier see marketing brochure 2004FC-78 and Application Engineering Bulletin AE-1297



Application

- Premium compacted bead filter-drier with a finer 20 micron final outlet pad for maximum filtration
- Premium Universal replacement liquid line filter drier for CFC, HCFC and HFC refrigerants including R-12, R-134a, R-22, R-404A, R-407C, R-410A, R-500, R-502, R-507

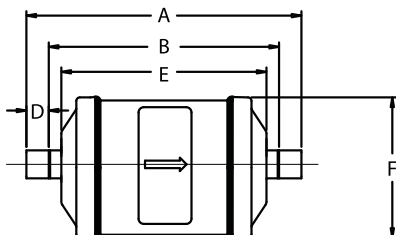
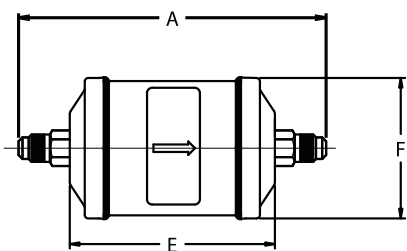
Features

- Filtration first for more effective use of surface area of desiccant
- High moisture and acid removal
- Solid copper fittings
- Corrosion resistant epoxy powder paint finish
- Approved for POE Oils with Copeland® products
- Shock resistant steel shell construction

Specifications

- Desiccant blend - optimized for high water capacity and acid capacity
- Filtration: 20 microns
- Maximum working pressure: 680 psig
- UL/CUL file number: SA 3124

Dimensional Data



For more information see 2003FC-91 Wholesaler Catalog for Emerson® Valves, Controls and System Protectors

Ordering Information

PCN	Description	Dimensions (in)					Weight (lbs)
		A	B	D	E	F	
060009	EK 032	4.38	-	-	2.56	1.63	0.50
060012	EK 032S	3.88	3.13	0.38			
060011	EK 032FM	3.50	-	-			
060010	EK 032MF	3.50	-	-			
060013	EK 033	4.69	-	-	3.00	0.88	0.50
060014	EK 033S	4.06	3.19	0.44			
047601	EK 052	4.81	-	-	3.00	0.88	0.50
057013	EK 052MF	4.50	-	-			
063978	EK 0525S	3.57	0.32	2.64	3.00	0.88	0.50
047602	EK 052S	4.44	3.69	0.38			
047603	EK 053	5.13	-	-	3.81	2.63	1.25
047604	EK 053S	4.50	3.63	0.44			
047605	EK 082	5.63	-	-	4.75	3.06	3.75
047606	EK 082S	5.25	4.50	0.38			
049551	EK 0825S	5.38	4.38	0.50	4.75	3.06	3.75
056906	EK 083MF	5.94	-	-			
047607	EK 083	5.31	4.44	0.44	7.50	3.06	3.75
047608	EK 083S	5.31	4.44	0.44			
047609	EK 084	6.19	-	-	7.50	3.06	3.75
047610	EK 084S	5.38	4.38	0.50			
047611	EK162	6.56	-	-	7.50	3.06	3.75
047612	EK 162S	6.19	5.44	0.38			
056045	EK 1625S	5.94	5.31	0.31	7.50	3.06	3.75
047613	EK 163	6.88	-	-			
047614	EK 163S	6.25	5.44	0.44	7.50	3.06	3.75
047615	EK 164	7.06	-	-			
047616	EK 164S	6.31	5.31	0.50	7.50	3.06	3.75
047617	EK 165	7.50	-	-			
047618	EK 165S	6.56	5.31	0.63	7.50	3.06	3.75
047619	EK 167S	7.50	5.63	0.75			
048210	EK 303	9.63	-	-	7.50	3.06	3.75
048211	EK 303S	9.00	8.13	0.44			
048212	EK 304	9.88	-	-	7.50	3.06	3.75
048213	EK 304S	9.13	8.13	0.50			
048214	EK 305	10.31	-	-	7.50	3.06	3.75
048215	EK 305S	9.31	8.06	0.63			
048216	EK 306S	9.69	8.44	-	7.50	3.06	3.75
048217	EK 307S	9.88	8.38	0.75			
048218	EK 309S	10.25	8.44	0.94	7.50	3.06	3.75
048219	EK 413	9.75	-	-			
048220	EK 414	10.00	-	-	7.50	3.06	3.75
048221	EK 414S	9.25	8.25	0.50			
048222	EK 415	10.44	-	-	7.50	3.06	3.75
048223	EK 415S	9.44	8.19	0.63			
048224	EK 417S	10.00	-	-	7.50	3.06	3.75
048225	EK 419S	10.94	8.50	0.75			
048228	EK 757S	15.44	13.94	-	13.06	7.50	7.50
048229	EK 759S	15.75	13.88	0.94			

¹Does not include weld bead

Standard product offering

Nomenclature (example: EK-083S)

EK	08	3	S
Drier Series	Unit Size (in cu. in.)	Connection Size (in 1/8")	S=ODF connections (omit for SAE)

EK Filter Drier

Capacity Data

Description	Connections Inlet/Outlet	Flow Capacity Tons @ 1 psi ΔP ^{1,4} (For kW, multiply tons by 3.5)						Water Capacity ² Drops of Water ³														
		R-12		R-134a		R-407C		R-12		R-134a		R-22		R-407C		R-410A		R-404A/507		R-502		
		75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	
EK 03 2 FM	1/4 Fem/1/4 Male SAE	1.6	2.0	2.2	2.1	1.4																
EK 03 2 MF	1/4 Male/1/4 Fem SAE	1.6	2.0	2.2	2.1	1.4																
EK 03 2	1/4 SAE	1.6	2.0	2.2	2.1	1.4																
EK 03 2 S	1/4 ODF	2.2	2.7	2.9	2.9	2.0	47	41	40	37	40	33	33	25	21	19	38	37	42	37		
EK 032 SV	1/4 ODF	2.2	2.7	2.9	2.9	2.0																
EK 03 3	3/8 SAE	2.5	3.0	3.3	3.2	2.2																
EK 03 3 S	3/8 ODF	2.5	3.0	3.3	3.2	2.2																
EK 05 2 FM	1/4 Fem/1/4 Male SAE	1.7	2.1	2.3	2.2	1.5																
EK 05 2 MF	1/4 Male/1/4 Fem SAE	1.7	2.1	2.3	2.2	1.5																
EK 05 2	1/4 SAE	1.7	2.1	2.3	2.2	1.5																
EK 05 2 S	1/4 ODF	2.7	3.3	3.6	3.5	2.4	133	119	116	106	114	97	95	75	64	58	109	106	120	107		
EK 05 3 MF	3/8 Male/3/8 Fem SAE	2.9	3.5	3.8	3.7	2.5																
EK 05 3	3/8 SAE	2.9	3.5	3.8	3.7	2.5																
EK 05 3 S	3/8 ODF	3.6	4.4	4.8	4.7	3.2																
EK 08 2 FM	1/4 Fem/1/4 Male SAE	1.9	2.3	2.5	2.4	1.7																
EK 08 2 MF	1/4 Male/1/4 Fem SAE	1.9	2.3	2.5	2.4	1.7																
EK 08 2	1/4 SAE	1.9	2.3	2.5	2.4	1.7																
EK 08 2 S	1/4 ODF	2.5	3.1	3.4	3.3	2.2																
EK 08 25 S	5/16 ODF	2.9	3.5	3.8	3.7	2.5																
EK 08 3 MF	3/8 Male/3/8 Fem SAE	3.3	4.0	4.3	4.3	2.9	274	240	237	218	235	200	195	155	159	118	224	217	245	217		
EK 08 3	3/8 SAE	3.3	4.0	4.3	4.3	2.9																
EK 08 3 S	3/8 ODF	3.7	4.5	4.9	4.8	3.3																
EK 08 4	1/2 SAE	5.5	6.7	7.3	7.1	4.9																
EK 08 4 S	1/2 ODF	5.8	7.1	7.7	7.5	5.1																
EK 16 2 MF	1/4 Male/1/4 Fem SAE	1.9	2.3	2.5	2.4	1.7																
EK 16 2	1/4 SAE	1.9	2.3	2.5	2.4	1.7																
EK 16 2 S	1/4 ODF	2.5	3.1	3.4	3.3	2.2																
EK 16 25 S	5/16 ODF	2.5	3.1	3.4	3.3	2.2																
EK 16 3	3/8 SAE	3.2	3.9	4.2	4.1	2.8	347	301	371	341	368	313	305	240	206	186	350	340	306	272		
EK 16 3 S	3/8 ODF	3.6	4.4	4.8	4.7	3.2																
EK 16 4 S	1/2 ODF	7.0	8.5	9.2	9.0	6.2																
EK 16 5	5/8 SAE	8.0	9.7	10.5	10.3	7.0																
EK 16 5 S	5/8 ODF	8.3	10.1	10.9	10.7	7.3																
EK 16 7 S	7/8 ODF	12.7	15.5	16.8	16.5	11.2																
EK 30 3	3/8 SAE	3.5	4.3	4.7	4.6	3.1																
EK 30 3 S	3/8 ODF	5.2	6.3	6.8	6.7	4.6																
EK 30 4	1/2 SAE	6.6	8.1	8.8	8.6	5.9																
EK 30 4 S	1/2 ODF	8.2	10.0	10.8	10.6	7.2																
EK 30 5	5/8 SAE	8.7	10.6	11.5	11.3	7.7	601	526	664	611	657	561	548	434	515	355	627	608	536	477		
EK 30 6 S	3/4 ODF	12.1	14.8	16.0	15.7	10.7																
EK 30 7 S	7/8 ODF	13.8	16.8	18.2	17.9	12.2																
EK 30 9 S	1 1/8 ODF	16.1	19.6	21.2	20.8	14.2																
EK 41 3	3/8 SAE	3.5	4.3	4.7	4.6	3.1																
EK 41 4	1/2 SAE	8.5	10.4	11.3	11.1	7.5																
EK 41 4 S	1/2 ODF	8.9	10.8	11.7	11.5	7.8	1104	971	938	854	919	785	765	607	715	465	876	850	991	884		
EK 41 5	5/8 SAE	9.8	12.0	13.0	12.8	8.7																
EK 41 7 S	7/8 ODF	16.6	20.3	22.0	21.6	14.7																
EK 41 9 S	1 1/8 ODF	22.7	27.7	30.0	29.4	20.1																
EK 75 7 S	7/8 ODF	18.2	22.2	24.1	23.6	16.1	2368	2159	2159	2019	2159	1880	1810	1460	1460	1111	2019	2019	2229	2019		
EK 75 9 S	1 1/8 ODF	26.8	32.7	35.4	34.8	23.7																

¹ All ratings in accordance with ARI Standard 710-04. 86°F liquid refrigerant temperature
5°F saturated vapor temperature
3.1 lbs./min./ton for R-134a
2.9 lbs./min./ton for R-22 and R-407C
4.0 lbs./min./ton for R-404A/507 and R-12
2.7 lbs./min./ton for R-410A

² Water Capacities are based on:
Equilibrium Point Dryness (EPD) of:
50 parts per million for R-134a, R404-A/507,
R-410A and R-407C
60 parts per million for R-22
15 parts per million for R-12

³ 20 drops of water = 1 gram = 1 cc

⁴ For 2 PSI ΔP , Multiply values by 1.4

Refrigerant Volume (oz.)

Unit Size	R-12		R-134a		R-22		R-407C		R-410A		R-404A/R-507		R-502	
	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F
03	2.9	2.6	2.6	2.3	2.6	2.3	2.5	2.1	2.3	1.9	2.3	1.9	2.7	2.3
05	6.5	5.9	6.0	5.4	5.9	5.3	5.6	4.9	5.3	4.4	5.2	4.4	6.0	5.3
08	8.3	7.6	7.6	6.9	7.5	6.8	7.2	6.3	6.7	5.7	6.6	5.6	7.7	6.8
16	10.2	9.4	9.4	8.6	9.3	8.4	8.9	7.8	8.3	7.0	8.2	6.9	9.5	8.4
30	28.7	26.3	26.4	23.9	26.1	23.5	24.9	21.9	23.3	19.6	22.9	19.4	26.7	23.4
41	40.0	36.4	36.9	33.1	36.4	32.5	34.7	30.3	32.5	27.2	31.9	26.8	37.2	32.4
75	72.4	66.3	66.7	60.3	65.8	59.2	62.8	55.2	58.7	49.5	57.7	48.9	67.2	59.0

For more information see 2003FC-91 Wholesaler Catalog for Emerson® Valves, Controls and System Protectors

HMI-Hermetic Moisture Indicators

Application

- The HMI is designed to provide an accurate method of determining the moisture content of a system's refrigerant.
- The HMI has a unique high accuracy moisture indicator for CFC, HCFC, and HFC refrigerants.

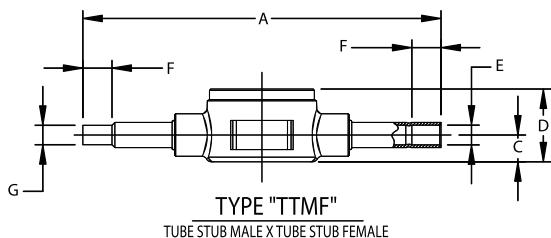
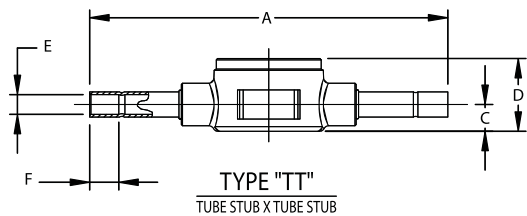
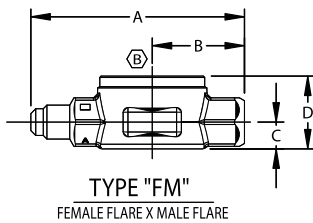
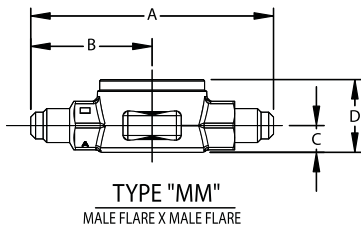
Features

- Highest sensitivity moisture indicator available
- Hermetic, leak-free construction
- Single indicator for all common refrigerants
- Accurate color calibration at low ppm levels and higher temperatures
- Wide angle viewing/high visibility window for ease of monitoring
- All brass corrosion resistant body for fewer leaks
- Solid copper connections

Specifications

- Maximum working pressure: 680 psig
- UL/CUL file number: SA 9566

Dimensional Data (in)



If it's not Blue,
It's not DRY!

Ordering Information

PCN	Description	Series	Connection Size	
065391	HMI-1MM2	Male Flare x Male Flare	1/4	
065392	HMI-1MM3		3/8	
065393	HMI-1MM4		1/2	
065394	HMI-1MM5		5/8	
065395	HMI-1MM6		3/4	
065405	HMI-1TT2		Sweat x Sweat (ODF)	1/4
065406	HMI-1TT3	3/8		
065407	HMI-1TT4	1/2		
065408	HMI-1TT5	5/8		
065409	HMI-1TT6	3/4		
065410	HMI-1TT7	7/8		
065411	HMI-1TT9	1 1/8		
065396	HMI-1FM2	Female Flare x Male Flare		1/4
065397	HMI-1FM3			3/8
065398	HMI-1FM4		1/2	
065622	HMI-1TT2MF	Sweat x Sweat (ODM x ODF)	1/4	
065814	HMI-1TT3MF		3/8	
065979	HMI-1TT4MF		1/2	
065980	HMI-1TT5MF		5/8	

Standard product offering

Nomenclature (example: HMI 1TT4)

HMI	1	TT	4
Hermetic Moisture Indicator	Series	Connection Style TT = Sweat x Sweat	Connection Size (in 1/8")

Moisture Content Color Code (ppm H₂O)

Indication Liquid Temp.	Dry (Dark Blue)			Caution (Purple)			Wet (Salmon)		
	75°F	100°F	125°F	75°F	100°F	125°F	75°F	100°F	125°F
R-12	1.4	2.5	4	5	9	15	25	43	70
R-134A	20	35	60	35	55	85	130	160	190
R-22	25	35	50	40	65	90	145	205	290
R-407C	26	40	64	42	68	109	150	230	370
R-410A	30	55	75	50	85	120	165	290	420
R-404A/507	15	25	45	33	50	80	120	150	180

Dimensional Data (in)

Type Number	Connection Size	A	B	C	D	E	F _{Min}	G
HMI - 1MM2	1/4 SAE	3.13	1.56	0.34	0.94			
HMI - 1MM3	3/8 SAE	3.38	1.69	0.34	0.94			
HMI - 1MM4	1/2 SAE	3.62	1.81	0.47	1.19			
HMI - 1MM5	5/8 SAE	3.88	1.94	0.47	1.19			
HMI - 1MM6	3/4 SAE	5.00	2.50	0.59	1.53			
HMI - 1FM2	1/4 SAE FM	2.75	1.19	0.34	0.94			
HMI - 1FM3	3/8 SAE FM	3.00	1.31	0.47	1.19			
HMI - 1FM4	1/2 SAE FM	3.22	1.41	0.47	1.19			
HMI - 1TT2	1/4 ODF	5.56		0.34	0.94	0.25	0.38	
HMI - 1TT3	3/8 ODF	5.61		0.34	0.94	0.38	0.40	
HMI - 1TT4	1/2 ODF	5.87		0.47	1.19	0.50	0.50	
HMI - 1TT5	5/8 ODF	5.87		0.61	1.19	0.63	0.63	
HMI - 1TT6	3/4 ODF	6.56		0.61	1.50	0.75	0.63	
HMI - 1TT7	7/8 ODF	6.31		0.61	1.50	0.88	0.75	
HMI - 1TT9	1 1/8 ODF	6.59		0.67	1.37	1.13	0.90	
HMI - 1TT2MF	1/4 ODM x 1/4 ODF	5.56		0.34	0.94	0.25	0.38	0.25
HMI - 1TT3MF	3/8 ODM x 3/8 ODF	5.61		0.34	0.94	0.38	0.38	0.38
HMI - 1TT4MF	1/2 ODM x 1/2 ODF	5.87		0.47	1.19	0.50	0.50	0.50
HMI - 1TT5MF	5/8 ODM x 5/8 ODF	5.87		0.61	1.19	0.63	0.50	0.62

For more information see 2003FC-91 Wholesaler Catalog for Emerson® Valves, Controls and System Protectors

Emerson® HF/HFK series thermal expansion valve

The HF series is a balanced ported valve designed for refrigeration, air conditioning and heat pump applications.

Features

- Stainless steel replaceable power element eliminates corrosion and prevents valve failure
- Two body sizes provide capacities from 1/4 to 20 ton

Standard Body – HF & HFK

- The HF is offered several ways:
 - *Pre-packaged HFK service kits* – Include a mix of bodies and power elements with a complete set of cages to serve the most applications with a minimum of parts
 - *Individual components* – Bodies, cages, & power elements may be ordered separately
 - *Finished valves* – Assembled valves ready for immediate installation
- Bi-Flow capability up to 5-1/2 tons R-22 allows one valve to control the superheat in both cooling and heating modes

Extended Body – HF

- Capacity range from 8 to 20 tons (R-22)
- Finished valve only



NOTE: If the HF body is stamped HFK, the cage is replaceable.

Options

- ODF or SAE connections
- Straight-through or angle flow configurations
- Removable inlet strainer (ODF only)
- Internal or external equalizer

Specifications

- Maximum working pressure: 450 psig

Nomenclature example: HFESC 2 HC 5 FT 3/8 x 1/2 ODF S/T

HF	N	E	S	C	B	2	H	C	5 FT	3/8 x 1/2	ODF	S/T
Valve Series Balanced Port Design	Superheat Adjustment N = Non-Adjustable Omit for Adjustable	Equalizer E=External (Omit for Internal)	Connection Type S = Solder (Omit for SAE Flare)	Removable Inlet Strainer (optional) C = Inlet Strainer (ODF only)	Bleed Hole (optional) (Omit for no bleed hole)	Capacity Nominal Rating in Tons (See nominal capacity table below)	Refrigerant Code +F = R-12 • H = R-22 +M = R-134a • N = R-407C * P = R-507 * R = R-502 * S = R-404A	Charge Code C = medium temp CA = heat pump W(MOP) = press. limiting Z = low temp AA = wide range	Capillary Tube Length 5 FT (std)	Inlet x Outlet Connection Sizes 1/4 x 3/8 3/8 x 1/2	Connection Type SAE = flare ODF = solder	Configuration ANG = 90° angle S/T = straight-thru

+ = R-12 and R-134a are interchangeable refrigerant charges
 * = R-507, R-502 and R-404A are interchangeable refrigerant charges
 • = R-22 and R-407C are interchangeable refrigerant charges

HF Series-Nominal* Capacity Tables in Tons (kW)

Standard Body HF

R-12	R-134a	R-22/R-407C	R-502/R-404A/R-507
1/8 (0.4)	1/4 (0.9)	1/4 (0.9)	1/8 (0.4)
1/4 (0.9)	1/2 (1.8)	1/2 (1.8)	1/4 (0.9)
1/2 (1.8)	3/4 (2.7)	1 (3.5)	1/2 (1.8)
1 (3.5)	1 (3.5)	1 1/2 (5.3)	1 (3.5)
1 1/4 (4.4)	1 1/2 (5.3)	2 (7.0)	1 1/4 (4.4)
1 1/2 (5.3)	1 3/4 (6.2)	2 1/2 (8.8)	1 1/2 (5.3)
2 (7.0)	2 1/2 (8.8)	3 (11.0)	2 (7.0)
3 1/2 (12.0)	4 (14.0)	5 1/2 (20.0)	3 1/2 (12.0)

Extended Body HF

R-12	R-134a	R-22/R-407C	R-502/R-404A/R-507
5 (17.0)	6 (21.0)	8 (28.0)	5 (17.0)
6 (21.0)	7 1/2 (27.0)	10 (35.0)	7 (27.0)
9 (32.0)	11 (39.0)	15 (53.0)	10 (35.0)
12 (42.0)	14 (50.0)	20 (70.0)	13 (46.0)

All capacities shown are at 100°F condensing, 40°F evaporator temperature.
 *See Extended Capacity Tables for ratings at a wide range of conditions per ARI standard 750.

For more information see 2003FC-91 Wholesaler Catalog for Emerson® Valves, Controls and System Protectors

Ordering Information

Use the following tables to order individual components.

HFK Body Selection Table

PCN	Description	Type	Connections (Inlet x Outlet)
064881	KT-20298-1	HFKE	1/4 x 1/2 SAE Ang Inlet
064882	KT-20298-2	HFKE	3/8 x 1/2 SAE Ang Inlet
064883	KT-20298-3	HFKE	1/4 x 1/2 SAE Ang Inlet
064884	KT-20298-4	HFKE	3/8 x 1/2 SAE Ang Inlet
064885	KT-20298-5	HFKE	3/8 x 1/2 ODF Ang Inlet w/ Strainer
064886	KT-20298-6	HFKE	3/8 x 1/2 ODF Ang Inlet w/ Strainer
064887	KT-20298-7	HFKE	3/8 x 1/2 ODF S/T
064888	KT-20298-8	HFKE	3/8 x 5/8 ODF S/T
064889	KT-20298-9	HFKE	1/2 x 5/8 ODF S/T
064890	KT-20298-10	HFKE	1/2 x 7/8 ODF S/T
064891	KT-20298-11	HFKE	3/8 x 1/2 ODF S/T
064892	KT-20298-12	HFKE	3/8 x 5/8 ODF S/T
064895	KT-20298-13	HFKE	1/2 x 5/8 ODF S/T
064896	KT-20298-14	HFKE	1/2 x 7/8 ODF S/T

HF & HFKE Power Element Table

PCN	Description	System Refrigerant(s)	Application
053769	X26300-FW15-1	R-134a/R-12	Low Temp MOP
054798	X26300-FW35-1	R-134a/R-12	Low Temp MOP
063869	X26300-FW55-1	R-134a/R-12	Low Temp MOP
053766	X26300-FZ-1	R-134a/R-12	Low Temp
053763	X26300-FC-1	R-134a/R-12	Medium Temp
058074	X26300-MC-1	R-134a	Medium Temp
053767	X26300-HZ-1	R-22/R-407C	Low Temp
057834	X26300-HCA-1	R-22/R-407C	Heat Pump
057764	X26300-HW100-1	R-22/R-407C	AC MOP
053764	X26300-HC-1	R-22/R-407C	A/C Med. Temp
058085	X26300-SW45-1	R-404/ R-507/ R-502	Low Temp MOP
058082	X26300-SZ-1	R-404/ R-507/ R-502	Low Temp
058083	X26300-SC-1	R-404/ R-507/ R-502	Medium Temp

HFKE Cage Nominal* Capacity Table

PCN	Description ¹	Cage Code	R-12	R-22	R-134a	R-404	R-507	R-502	R-407C
064868	KT-20299-0	0	1/8	1/4	1/4	1/8	1/8	1/8	1/4
064869	KT-20299-1	1	1/4	1/2	1/2	1/4	1/4	1/4	1/2
064870	KT-20299-2	2	1/2	1	3/4	1/2	1/2	1/2	1
064871	KT-20299-3	3	1	1 1/2	1	1	1	1	1 1/2
064872	KT-20299-4	4	1 1/4	2	1 1/2	1 1/4	1 1/4	1 1/4	2
064873	KT-20299-5	5	1 1/2	2 1/2	1 3/4	1 1/2	1 1/2	1 1/2	2 1/2
064874	KT-20299-6	6	2	3	2 1/2	2	2	2	3
064875	KT-20299-7	7	3 1/2	5 1/2	4	3 1/2	3 1/2	3 1/2	5 1/2

¹ Cage Kit includes Cage, Insertion Tool and ID Clips.

*All capacities shown are at 100°F condensing, 40°F evaporator temperature.

See Extended Capacity Tables for ratings at a wide range of conditions per ARI standard 750.

Cage Kit (PCN 064879)

Item	Qty
Size 0 Cage (1/4 ton R-22)	2
Size 1 Cage (1/2 ton R-22)	2
Size 2 Cage (1 ton R-22)	2
Size 3 Cage (1 1/2 ton R-22)	2
Size 4 Cage (2 ton R-22)	2
Size 5 Cage (2 1/2 ton R-22)	2
Size 6 Cage (3 ton R-22)	2
Size 7 Cage (5 1/2 ton R-22)	2
Insertion Tool	1
Oil Bottle	1
Cage ID Tags	16

Replacement Parts – SAE Inlet

PCN	Part Number	Description
027385	X-11176-1	Filter Screen
058707	27676-1	Seal Cap

Replacement Parts- HFKE & HFKE Only

PCN	Kit Number	Description
057686	KT-20264	Includes seal cap, gasket o-ring, screen, spring

HFKE Accessories

PCN	Description
064880	Service Box
064897	Cage Box (Empty)
064898	Insertion Tool
064899	Oil Bottle
065203	Cage Gasket Kit (12 sets)

TXV SUPERHEAT ADJUSTMENT

Valve Family	Total Turns	Degrees of SH Per Turn					
		R-22		R-134a	R-404A/507		R410A
		+20 F	-20 F	+20 F	+20F	-20F	+40F
A	8	3.0	5.0	4.5	2.0	4.0	2.0
C	12	–	–	–	–	–	4.0
HF	10	2.2	4.2	3.8	1.8	3.2	N/A
TF	10	3.0	5.0	4.5	2.0	4.0	2.0
TRAE	10	2.2	4.2	3.8	1.8	3.2	N/A
TCLE	32	0.8	1.5	1.0	0.5	1.0	N/A

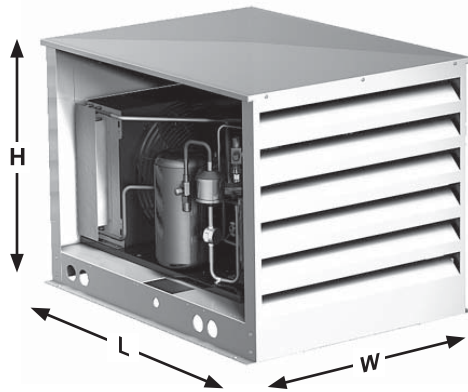
Turn adjustment clockwise to increase superheat, counterclockwise to decrease superheat. To return to approximate original factory setting, turn adjustment stem counterclockwise until the spring is completely unloaded (reaches stop or starts to ratchet). Then, turn it back in one half of the Total Turns shown on the chart.

Standard Product Offering

For more information see 2003FC-91 Wholesaler Catalog for Emerson® Valves, Controls and System Protectors

Flex-Line hoods for SystemPro® condensing units

- Four outdoor enclosures to cover all ½ to 6 HP SystemPro® units
- Assembly time reduced 50%
- UL listed
- Elevated rails
- Sliding panels for ease of service
- Ample space for additional features



Hood Selection

Copeland® Model	Dimensions (in.)			Hood	Flex-Line Hood
	L	W	H		
SystemPro® Air-Cooled					
M2FH-0017	13.8	11.8	9.7	005-0882-00 / -09	505-7066-00
M2FH-0026	13.8	11.8	9.7	005-0882-00 / -09	505-7066-00
M2FH-0033	13.8	11.8	9.7	005-0882-00 / -09	505-7066-00
M2FH-0056	17.4	14.4	11.8	005-0882-00 / -09	505-7066-00
M4FH-0025	13.8	11.8	9.7	005-0882-00 / -09	505-7066-00
M4FH-A036	16.1	12.7	11.8	005-0882-00 / -09	505-7066-00
M2FL-0020	13.8	11.1	9.7	005-0882-00 / -09	505-7066-00
M2FL-A025	13.8	11.8	9.7	005-0882-00 / -09	505-7066-00
M2FL-B033	16.2	12.4	9.7	005-0882-00 / -09	505-7066-00
M4FL-0040	16.2	13.1	11.8	005-0882-00 / -09	505-7066-00
M4FL-0051	17.4	13.1	11.8	005-0882-00 / -09	505-7066-00
M4FL-0067	18.1	14.4	11.8	005-0882-00 / -09	505-7066-00
MCFH-0027	13.8	11.8	9.7	005-0882-00 / -09	505-7066-00
MCFH-0036	16	12.9	11.8	005-0882-00 / -09	505-7066-00
MCFH-0056	17.5	14.3	11.8	005-0882-00 / -09	505-7066-00
M4FF-0056	17.5	14.3	12.1	005-0882-00 / -09	505-7066-00
M4FF-0080	24.0	16.9	13.1	005-0882-00 / -09	505-7066-01
FJAL-A101	24.0	16.9	13.1	005-0882-00 / -09	505-7066-01
FJAL-B200	24.0	19.5	16.3	005-0882-02 / -10	505-7066-01
FJAL-B301	25.2	34.1	19.0	005-0882-01 / -11	505-7066-02
FJAL-A390	25.2	34.1	19.0	005-0882-01 / -11	505-7066-02
FJAF-0106	24.0	18.3	16.2	005-0882-00 / -09	505-7066-01
FJAM-A200	25.2	34.1	18.9	005-0882-01 / -11	505-7066-02
FJAM-B400	28.2	44.1	26.9	005-0882-04	505-7066-03
FTAH-B074	17.4	14.4	11.8	005-0882-00 / -09	505-7066-00
FTAH-A101	24.0	16.8	15.9	005-0882-00 / -09	505-7066-01
FTAH-A150	24.0	18.4	16.3	005-0882-02 / -10	505-7066-01
FTAH-A201	25.2	34.0	18.9	005-0882-01 / -11	505-7066-02
FTAL-A050	16.0	13.3	11.9	005-0882-00 / -09	505-7066-00
FGAH-A151	24.1	18.3	16.9	005-0882-02 / -10	505-7066-01
FGAH-A201	25.0	34.0	19.0	005-0882-01 / -11	505-7066-02
FGAH-A301	25.0	34.0	19.0	005-0882-01 / -11	505-7066-02
FGAH-A401	28.6	44.1	26.9	005-0882-04	505-7066-03
FGAH-A501	28.6	44.1	26.9	005-0882-04	505-7066-03
F3AH-A078	24.0	16.9	13.1	005-0882-00 / -09	505-7066-01
F3AH-A100	24.0	16.9	13.1	005-0882-00 / -09	505-7066-01

Hood Specification Data

Emerson Part #	Mfg. Part #	External Dimensions (in.)			Internal Dimensions (in.)			Unit Size*
		L	W	H	L	W	H	
505-7066-00	N/A	24.3	20.2	18.7	22.5	18.4	15.0	1/2 Hp to 3/4 Hp
505-7066-01	N/A	30.3	23.5	22.7	28.5	22.2	19	3/4 Hp to 2 Hp
505-7066-02	N/A	32.3	38.3	22.7	30.6	37.1	24.0	2 Hp to 3 Hp
505-7066-03	N/A	35.3	48	34.7	33.6	46.2	30.7	4 Hp to 6 Hp
005-0882-03	CHO-13	35.5	24.0	25.0	34.5	24.0	21.0	
005-0882-05	CHO-16	46.5	38.0	38.0	45.5	38.0	33.0	
005-0882-06	CHO-17	42.5	74.0	48.5	41.5	74.0	40.5	

UL Listed for outdoor use * Specific model to hood cross reference should be used.

Flex-Line hoods for semi-hermetic condensing units

Hood Selection

Copeland® Model	Dimensions (in.)			Hood	Flex-Line Hood
	L	W	H		
Copelametic®					
E3AH-A050	19.5	14.8	12.0	005-0882-00 / -09	505-7066-00
E3AM-A075	24.0	17.9	13.6	005-0882-00 / -09	505-7066-01
E8AJ-A075	24.0	17.9	13.6	005-0882-00 / -09	505-7066-01
E8AL-A050	19.5	16.3	12.0	005-0882-00 / -09	505-7066-00
E8AL-A075	24.0	17.9	13.3	005-0882-00 / -09	505-7066-01
E8AM-A050	19.5	14.8	12.0	005-0882-00 / -09	505-7066-00
ENAG-A050	19.5	16.3	12.0	005-0882-00 / -09	505-7066-00
ENAG-A075	24.0	17.9	12.0	005-0882-00 / -09	505-7066-01
CBAM-0103	33.5	20.0	19.0	005-0882-03	N/A
C3AM-0101	33.5	20.0	19.0	005-0882-03	N/A
C8AJ-0100	33.5	20.0	19.0	005-0882-03	N/A
C8AJ-0200	33.5	20.0	19.0	005-0882-03	N/A
ENAG-A100	24.0	17.9	13.3	005-0882-00 / -09	505-7066-01
E3AM-A101	26.2	18.3	16.0	005-0882-01 / -11	505-7066-01
CPAK-0150	33.5	20.0	19.0	005-0882-03	N/A
C3AH-0150	33.5	20.0	19.0	005-0882-03	N/A
C3AM-0303	39.0	30.0	29.5	005-0882-05	N/A
C7AB-0150	33.0	20.0	19.0	005-0882-03	N/A
C7AB-0200	33.5	20.0	19.0	005-0882-03	N/A
C7AB-0300	39.0	30.0	29.5	005-0882-05	N/A
C8AL-0151	33.5	20.0	19.0	005-0882-03	N/A
C8AL-0200	33.5	20.0	19.0	005-0882-03	N/A
CNAG-0200	33.5	20.0	19.0	005-0882-03	N/A
C8AJ-0300	39.0	30.0	29.5	005-0882-05	N/A
C8AM-0202	33.5	20.0	19.0	005-0882-03	N/A
CJAL-0300	39.0	30.0	29.5	005-0882-05	N/A
CLAL-0300	39.0	30.0	29.5	005-0882-05	N/A
CPDK-0300	39.0	30.0	29.5	005-0882-05	N/A
CPDK-0600	44.0	36.0	31.5	005-0882-05	N/A
CPDK-0750	44.0	36.0	31.5	005-0882-05	N/A
CJDL-0400	39.0	30.0	29.5	005-0882-05	N/A
CMDL-0400	39.0	30.0	29.5	005-0882-05	N/A
C8DJ-0500	39.0	30.0	29.5	005-0882-05	N/A
C8DJ-0501	39.0	30.0	29.5	005-0882-05	N/A
C8DJ-0750	44.0	36.0	31.5	005-0882-05	N/A
C8DJ-1000	39.0	66.0	36.0	005-0882-06	N/A

Flex-Line hoods for scroll condensing units

Hood Selection

Copeland® Model	Dimensions (in.)			Hood	Flex-Line Hood
	L	W	H		
Copeland Scroll®					
FTAH-A13Z	24.0	18.3	16.3	005-0882-01 / -10	505-7066-01
FJAM-A15Z	24.0	18.3	16.3	005-0882-01 / -10	505-7066-01
FTAH-A15Z	24.0	18.3	16.3	005-0882-01 / -10	505-7066-01
FFAS-A20Z	25.2	34.0	19.0	005-0882-01 / -11	505-7066-02
FFAS-A25Z	25.2	34.0	19.0	005-0882-01 / -11	505-7066-02
FFAS-A30Z	25.2	34.0	19.0	005-0882-01 / -11	505-7066-02
FFAS-A35Z	25.2	34.0	19.0	005-0882-01 / -11	505-7066-02
FFAS-A40Z	28.2	44.1	26.8	005-0882-04	505-7066-03
FFAS-A50Z	28.2	44.1	26.8	005-0882-04	505-7066-03
FFAS-A60Z	28.2	44.1	26.8	005-0882-04	505-7066-03
FPAN-070Z	28.5	44.0	36.8	005-0882-04	N/A
FPAN-080Z	28.5	44.0	36.8	005-0882-04	N/A
FPAN-091Z	28.5	44.0	36.8	005-0882-04	N/A
FPAN-101Z	28.5	44.0	36.8	005-0882-04	N/A
DJAL-015Z	25.2	34.3	19.0	005-0882-01 / -11	505-7066-02
DJAL-020Z	25.2	34.3	19.0	005-0882-01 / -11	505-7066-02
DJAL-022Z	25.2	34.3	19.0	005-0882-01 / -11	505-7066-02
DJAL-026Z	25.2	34.3	19.0	005-0882-01 / -11	505-7066-02
DJAL-030Z	25.2	34.3	19.0	005-0882-01 / -11	505-7066-02
DJAL-041Z	28.2	44.1	26.8	005-0882-04	505-7066-03
DJAL-051Z	28.2	44.1	26.8	005-0882-04	505-7066-03
DJAL-060Z	28.2	44.1	26.8	005-0882-04	505-7066-03

Refrigerants/Lubricants Approved for Use in Copeland® Compressors

	Refrigerants	Similar To	Application		Preferred	Lubricant Choices		Comments
			Retrofit	New		Alternate #1	Alternate #2	
Ozone Depleting	CFC R-12		L,M		MIN	AB & MIN		Phased Out in 1996
	CFC R-502		L,M		MIN	AB & MIN	POE-32	Phased Out in 1996
	HCFC R-22		L,M,H		MIN	AB & MIN	POE-32	No New Equipment 2010
Interims	HCFC R-401A	R-12	M,H		AB & MIN	POE-32 & MIN	POE-32	Service Only Suva® MP39
	HCFC R-401B	R-12	L,M		AB & MIN	POE-32 & MIN	POE-32	Service Only Suva® MP66
	HCFC R-402A	R-502	L,M		AB & MIN	POE-32 & MIN	POE-32	Service Only Suva® HP80
	HCFC R-402B	R-502	L,M		AB & MIN	POE-32 & MIN	POE-32	Service Only Suva® HP81
	HCFC R-408A	R-502	L,M		AB & MIN	POE-32 & MIN	POE-32	Service Only FX10
	HCFC R-409A	R-12	L,M		AB & MIN	POE-32 & MIN	POE-32	Service Only FX56
	HFC R-134a	R-12	M,H	M,H	POE-32			
Non-Ozone Depleting	HFC R-404A	R-502	L,M	L,M	POE-32			Suva® HP62, Forane® FX70
	HFC R-507	R-502	L,M	L,M	POE-32			Genetron® AZ50
	HFC R-407A	R-22	L,M	L,M	POE-32			
	HFC R-407C	R-22	L,M,H	L,M,H	POE-32			Suva® 9000/KLEA 66
	HFC R-410A			M,H	POE-32			ZP & ZB KCP Copeland Scroll® Models Only
	HFC R-422A/D	R-22	L,M		MIN	POE-32	AB	Discus® Supermarket Racks Only
	HFC R-438A	R-22	L,M		MIN	POE-32	AB	Discus® Supermarket Racks Only; ISCEON® MO99
	R-704 Helium				PAG			ZC Copeland Scroll® Models Only
	R-744 CO ₂				POE*			ZO Copeland Scroll® Models Only

Legend:

- MIN: Mineral Oil (Copeland® 46BWMO, Sonneborn Suniso 3GS), Chevron/Texaco Capella WF32) Mineral oils are interchangeable for 'top off' purposes
 AB: Alkyl Benzene Oil (Copeland® Ultra 200, Shrieve Zerol 200 TD, Sonneborn Suniso AKB200A, Shell 2212)
 POE32: Polyolester Oil (Copeland® Ultra 32-3MAF, Lubrizol Emkarate RL32-3MAF, Parker EMKARATE RL32-3MAF/ (Virginia) LE323MAF, Nu Calgon 4314-66 (EMKARATERL32-3MAF)
 Hatcol 22 CC, Copeland® Ultra 22 CC & Mobil Arctic 22 CC (last three for 'top off' only)
 POE*: Contact Application Engineer for oil details
 PAG: Polyalkylene Glycol Oil (Lubrizol RPAG 62, UCON LB300X)
 POE-32 & MIN: Minimum 50% POE
 AB & MIN: Minimum 50% Alkyl Benzene
 L: Low Temperature Application (Refrigeration) For R-407A, R-407C, R-422A/D, R-438A, Demand Cooling® is required for low temperature application - See AE guidelines for details
 M: Medium Temperature Application (Refrigeration)
 H: High Temperature Application (Air-Conditioning, Heat Pump, Refrigeration)

Spectronics AR-GLO 4/E Fluorescent Leak Detection Dye is approved for HFC/POE and HCFC/Mineral Oil usage at the manufacturer's recommended concentrations.

For specific product availability and performance data refer to Emerson Climate Technologies, Inc. sales literature
 Refer To Application Bulletins, Change-Over Guidelines And MSDS Sheets for additional information at EmersonClimate.com



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