

HCFC, R-22 ,Mid Point, 60 Hz, 3 - Phase, 208/230 V

Low Temp, Liquid Injected

Production Status: Available for sale to all U.S. customers. Please check with your local Emerson Climate Technologies Representative for international availability.

Performance

Evap(°F)/Cond(°F)	-25/105	-40/105
RG(°F)/Liq(°F)	65/105	65/105
Capacity (Btu/hr):	21800	14900
Power (Watts):	5400	4960
Current (Amps):	19.7	18.8
EER (Btu/Wh):	4.0	3.0
Mass Flow(lbs/hr):	291	198
Sound Power (dBA):	86 Ave	91 Max
Vibration(mils(peak-peak)):	2.0 Ave	3.0 Max

Mechanical

Number of Cylinders:	0	CIR (ft ³ /hr):	7.319
Bore Size (in):	0.0	CFH (ft ³ /hr):	889.4634
Stroke (in):	0.0		
Overall Length (in):	12.44	Mounting Length (in):	8.65
Overall Width (in):	14.5	Mounting Width (in):	8.65
Overall Height (in):	21.34	Mounting Height (in):	22.09*
Suction Size(in):	1 3/4	Rotalock	
Discharge Size (in):	1 1/4	Rotalock	
Initial Oil Charge (oz):	140		
Oil Recharge (oz):	137		
Net Weight (lbs):	221.0		
HorsePower	7.5		
* Overall compressor height on Copeland Brand Product's specified mounting grommets.			

Electrical

LRA-High*:	189.0	UL File No.:	SA-9747	Max Operating Current(Amps):	33.5
LRA-Low*:		UL File Date:	01-Jan-1900	MCC (Amps):	28.0
LRA-Half Winding:	169.0	CSA File No.:	LR101508	RPM:	3500
RLA (=MCC/1.4; use for contactor selection):	20				
RLA (=MCC/1.56; use for breaker & wire size selection):	17.9				
*Low and High refer to the low and high nominal voltage ranges for which the motor is approved.					

Alternate Applications

Refrigerant	Frequency(Hz)	Phase	Voltage	Application
R-134a HFC	50	3	200	High Temperature
R-134a HFC	50	3	200	Low Temp, Liquid Injected
R-134a HFC	50	3	200	Medium Temp, Liquid Injected
R-22 HCFC	50	3	200	Low Temp, Liquid Injected
R-22 HCFC	50	3	200	Medium Temp, Liquid Injected
R-404A HFC	50	3	200	Low Temp, Low Condensing
R-404A HFC	50	3	200	Low Temp, Liquid Injected
R-404A HFC	50	3	200	Medium Temp, Liquid Injected
R-507 HFC	50	3	200	Low Temp, Low Condensing
R-507 HFC	50	3	200	Low Temp, Liquid Injected
R-507 HFC	50	3	200	Medium Temp, Liquid Injected
R-134a HFC	60	3	208/230	High Temperature
R-134a HFC	60	3	208/230	Low Temp, Liquid Injected
R-134a HFC	60	3	208/230	Medium Temp, Liquid Injected
R-22 HCFC	60	3	208/230	Medium Temp, Liquid Injected
R-404A HFC	60	3	208/230	Low Temp, Low Condensing
R-404A HFC	60	3	208/230	Low Temp, Liquid Injected
R-404A HFC	60	3	208/230	Medium Temp, Liquid Injected
R-507 HFC	60	3	208/230	Low Temp, Low Condensing
R-507 HFC	60	3	208/230	Low Temp, Liquid Injected
R-507 HFC	60	3	208/230	Medium Temp, Liquid Injected

HCFC, R-22 ,Mid Point, 60 Hz, 3 - Phase, 208/230 V

Medium Temp, Liquid Injected

Production Status: Available for sale to all U.S. customers. Please check with your local Emerson Climate Technologies Representative for international availability.

Performance

Evap(°F)/Cond(°F)	20/120	0/110
RG(°F)/Liq(°F)	65/120	65/110
Capacity (Btu/hr):	54500	37800
Power (Watts):	7500	6300
Current (Amps):	24.2	21.6
EER (Btu/Wh):	7.3	6.0
Mass Flow(lbs/hr):	795	520
Sound Power (dBA):	86 Ave	91 Max
Vibration(mils(peak-peak)):	2.0 Ave	3.0 Max

Mechanical

Number of Cylinders:	0	CIR (ft ³ /hr):	7.319
Bore Size (in):	0.0	CFH (ft ³ /hr):	889.4634
Stroke (in):	0.0		
Overall Length (in):	12.44	Mounting Length (in):	8.65
Overall Width (in):	14.5	Mounting Width (in):	8.65
Overall Height (in):	21.34	Mounting Height (in):	22.09*
Suction Size(in):	1 3/4	Rotalock	
Discharge Size (in):	1 1/4	Rotalock	
Initial Oil Charge (oz):	140		
Oil Recharge (oz):	137		
Net Weight (lbs):	221.0		
HorsePower			
* Overall compressor height on Copeland Brand Product's specified mounting grommets.			

Electrical

LRA-High*:	189.0	UL File No.:	SA-9747	Max Operating Current(Amps):	33.5
LRA-Low*:		UL File Date:	01-Jan-1900	MCC (Amps):	32.0
LRA-Half Winding:	169.0	CSA File No.:	LR101508	RPM:	3500
RLA (=MCC/1.4; use for contactor selection):	22.9				
RLA (=MCC/1.56; use for breaker & wire size selection):	20.5				
*Low and High refer to the low and high nominal voltage ranges for which the motor is approved.					

Alternate Applications

Refrigerant	Frequency(Hz)	Phase	Voltage	Application
R-134a HFC	50	3	200	High Temperature
R-134a HFC	50	3	200	Low Temp, Liquid Injected
R-134a HFC	50	3	200	Medium Temp, Liquid Injected
R-22 HCFC	50	3	200	Low Temp, Liquid Injected
R-22 HCFC	50	3	200	Medium Temp, Liquid Injected
R-404A HFC	50	3	200	Low Temp, Low Condensing
R-404A HFC	50	3	200	Low Temp, Liquid Injected
R-404A HFC	50	3	200	Medium Temp, Liquid Injected
R-507 HFC	50	3	200	Low Temp, Low Condensing
R-507 HFC	50	3	200	Low Temp, Liquid Injected
R-507 HFC	50	3	200	Medium Temp, Liquid Injected
R-134a HFC	60	3	208/230	High Temperature
R-134a HFC	60	3	208/230	Low Temp, Liquid Injected
R-134a HFC	60	3	208/230	Medium Temp, Liquid Injected
R-22 HCFC	60	3	208/230	Low Temp, Liquid Injected
R-404A HFC	60	3	208/230	Low Temp, Low Condensing
R-404A HFC	60	3	208/230	Low Temp, Liquid Injected
R-404A HFC	60	3	208/230	Medium Temp, Liquid Injected
R-507 HFC	60	3	208/230	Low Temp, Low Condensing
R-507 HFC	60	3	208/230	Low Temp, Liquid Injected
R-507 HFC	60	3	208/230	Medium Temp, Liquid Injected

HFC, R-134a ,Mid Point, 60 Hz, 3 - Phase, 208/230 V

Low Temp, Liquid Injected

Production Status: Available for sale to all U.S. customers. Please check with your local Emerson Climate Technologies Representative for international availability.

Performance

Evap(°F)/Cond(°F)	-25/105	-40/105
RG(°F)/Liq(°F)	65/105	65/105
Capacity (Btu/hr):	12700	8170
Power (Watts):	3220	2950
Current (Amps):	16	15.6
EER (Btu/Wh):	3.9	2.8
Mass Flow(lbs/hr):	182	117
Sound Power (dBA):	86 Ave	91 Max
Vibration(mils(peak-peak)):	2.0 Ave	3.0 Max

Mechanical

Number of Cylinders:	0	CIR (ft ³ /hr):	7.319
Bore Size (in):	0.0	CFH (ft ³ /hr):	889.4634
Stroke (in):	0.0		
Overall Length (in):	12.44	Mounting Length (in):	8.65
Overall Width (in):	14.5	Mounting Width (in):	8.65
Overall Height (in):	21.34	Mounting Height (in):	22.09*
Suction Size(in):	1 3/4	Rotalock	
Discharge Size (in):	1 1/4	Rotalock	
Initial Oil Charge (oz):	140		
Oil Recharge (oz):	137		
Net Weight (lbs):	221.0		
HorsePower	7.5		
* Overall compressor height on Copeland Brand Product's specified mounting grommets.			

Electrical

LRA-High*:	189.0	UL File No.:	SA-9747	Max Operating Current(Amps):	33.5
LRA-Low*:		UL File Date:	12-Jul-1994	MCC (Amps):	31.0
LRA-Half Winding:	169.0	CSA File No.:	LR101508	RPM:	3500
RLA (=MCC/1.4; use for contactor selection):	22.1				
RLA (=MCC/1.56; use for breaker & wire size selection):	19.9				
*Low and High refer to the low and high nominal voltage ranges for which the motor is approved.					

Alternate Applications

Refrigerant	Frequency(Hz)	Phase	Voltage	Application
R-134a HFC	50	3	200	High Temperature
R-134a HFC	50	3	200	Low Temp, Liquid Injected
R-134a HFC	50	3	200	Medium Temp, Liquid Injected
R-22 HCFC	50	3	200	Low Temp, Liquid Injected
R-22 HCFC	50	3	200	Medium Temp, Liquid Injected
R-404A HFC	50	3	200	Low Temp, Low Condensing
R-404A HFC	50	3	200	Low Temp, Liquid Injected
R-404A HFC	50	3	200	Medium Temp, Liquid Injected
R-507 HFC	50	3	200	Low Temp, Low Condensing
R-507 HFC	50	3	200	Low Temp, Liquid Injected
R-507 HFC	50	3	200	Medium Temp, Liquid Injected
R-134a HFC	60	3	208/230	High Temperature
R-134a HFC	60	3	208/230	Medium Temp, Liquid Injected
R-22 HCFC	60	3	208/230	Low Temp, Liquid Injected
R-22 HCFC	60	3	208/230	Medium Temp, Liquid Injected
R-404A HFC	60	3	208/230	Low Temp, Low Condensing
R-404A HFC	60	3	208/230	Low Temp, Liquid Injected
R-404A HFC	60	3	208/230	Medium Temp, Liquid Injected
R-507 HFC	60	3	208/230	Low Temp, Low Condensing
R-507 HFC	60	3	208/230	Low Temp, Liquid Injected
R-507 HFC	60	3	208/230	Medium Temp, Liquid Injected

HFC, R-134a ,Mid Point, 60 Hz, 3 - Phase, 208/230 V

Medium Temp, Liquid Injected

Production Status: Available for sale to all U.S. customers. Please check with your local Emerson Climate Technologies Representative for international availability.

Performance

Evap(°F)/Cond(°F)	20/120	0/110
RG(°F)/Liq(°F)	65/120	65/110
Capacity (Btu/hr):	34400	23100
Power (Watts):	4550	3800
Current (Amps):	18.1	16.8
EER (Btu/Wh):	7.6	6.1
Mass Flow(lbs/hr):	550	345
Sound Power (dBA):	86 Ave	91 Max
Vibration(mils(peak-peak)):	2.0 Ave	3.0 Max

Mechanical

Number of Cylinders:	0	CIR (ft ³ /hr):	7.319
Bore Size (in):	0.0	CFH (ft ³ /hr):	889.4634
Stroke (in):	0.0		
Overall Length (in):	12.44	Mounting Length (in):	8.65
Overall Width (in):	14.5	Mounting Width (in):	8.65
Overall Height (in):	21.34	Mounting Height (in):	22.09*
Suction Size(in):	1 3/4	Rotalock	
Discharge Size (in):	1 1/4	Rotalock	
Initial Oil Charge (oz):	140		
Oil Recharge (oz):	137		
Net Weight (lbs):	221.0		
HorsePower			
* Overall compressor height on Copeland Brand Product's specified mounting grommets.			

Electrical

LRA-High*:	189.0	UL File No.:	SA-9747	Max Operating Current(Amps):	33.5
LRA-Low*:		UL File Date:	12-Jul-1994	MCC (Amps):	31.0
LRA-Half Winding:	169.0	CSA File No.:	LR101508	RPM:	3500
RLA (=MCC/1.4; use for contactor selection):	22.1				
RLA (=MCC/1.56; use for breaker & wire size selection):	19.9				
*Low and High refer to the low and high nominal voltage ranges for which the motor is approved.					

Alternate Applications

Refrigerant	Frequency(Hz)	Phase	Voltage	Application
R-134a HFC	50	3	200	High Temperature
R-134a HFC	50	3	200	Low Temp, Liquid Injected
R-134a HFC	50	3	200	Medium Temp, Liquid Injected
R-22 HCFC	50	3	200	Low Temp, Liquid Injected
R-22 HCFC	50	3	200	Medium Temp, Liquid Injected
R-404A HFC	50	3	200	Low Temp, Low Condensing
R-404A HFC	50	3	200	Low Temp, Liquid Injected
R-404A HFC	50	3	200	Medium Temp, Liquid Injected
R-507 HFC	50	3	200	Low Temp, Low Condensing
R-507 HFC	50	3	200	Low Temp, Liquid Injected
R-507 HFC	50	3	200	Medium Temp, Liquid Injected
R-134a HFC	60	3	208/230	High Temperature
R-134a HFC	60	3	208/230	Low Temp, Liquid Injected
R-22 HCFC	60	3	208/230	Low Temp, Liquid Injected
R-22 HCFC	60	3	208/230	Medium Temp, Liquid Injected
R-404A HFC	60	3	208/230	Low Temp, Low Condensing
R-404A HFC	60	3	208/230	Low Temp, Liquid Injected
R-404A HFC	60	3	208/230	Medium Temp, Liquid Injected
R-507 HFC	60	3	208/230	Low Temp, Low Condensing
R-507 HFC	60	3	208/230	Low Temp, Liquid Injected
R-507 HFC	60	3	208/230	Medium Temp, Liquid Injected

HFC, R-404A ,Mid Point, 60 Hz, 3 - Phase, 208/230 V

Low Temp, Liquid Injected

Production Status: Available for sale to all U.S. customers. Please check with your local Emerson Climate Technologies Representative for international availability.

Performance

Evap(°F)/Cond(°F)	-25/105	-40/105
RG(°F)/Liq(°F)	65/105	65/105
Capacity (Btu/hr):	23700	16000
Power (Watts):	5350	4910
Current (Amps):	19.7	18.9
EER (Btu/Wh):	4.4	3.3
Mass Flow(lbs/hr):	426	285
Sound Power (dBA):	86 Ave	91 Max
Vibration(mils(peak-peak)):	2.0 Ave	3.0 Max

Mechanical

Number of Cylinders:	0	CIR (ft ³ /hr):	7.319
Bore Size (in):	0.0	CFH (ft ³ /hr):	889.4634
Stroke (in):	0.0		
Overall Length (in):	12.44	Mounting Length (in):	8.65
Overall Width (in):	14.5	Mounting Width (in):	8.65
Overall Height (in):	21.34	Mounting Height (in):	22.09*
Suction Size(in):	1 3/4	Rotalock	
Discharge Size (in):	1 1/4	Rotalock	
Initial Oil Charge (oz):	140		
Oil Recharge (oz):	137		
Net Weight (lbs):	221.0		
HorsePower	7.5		
* Overall compressor height on Copeland Brand Product's specified mounting grommets.			

Electrical

LRA-High*:	189.0	UL File No.:	SA-9747	Max Operating Current(Amps):	33.5
LRA-Low*:		UL File Date:	12-Jul-1994	MCC (Amps):	36.5
LRA-Half Winding:	169.0	CSA File No.:	LR101508	RPM:	3500
RLA (=MCC/1.4; use for contactor selection):	26.1				
RLA (=MCC/1.56; use for breaker & wire size selection):	23.4				
*Low and High refer to the low and high nominal voltage ranges for which the motor is approved.					

Alternate Applications

Refrigerant	Frequency(Hz)	Phase	Voltage	Application
R-134a HFC	50	3	200	High Temperature
R-134a HFC	50	3	200	Low Temp, Liquid Injected
R-134a HFC	50	3	200	Medium Temp, Liquid Injected
R-22 HCFC	50	3	200	Low Temp, Liquid Injected
R-22 HCFC	50	3	200	Medium Temp, Liquid Injected
R-404A HFC	50	3	200	Low Temp, Low Condensing
R-404A HFC	50	3	200	Low Temp, Liquid Injected
R-404A HFC	50	3	200	Medium Temp, Liquid Injected
R-507 HFC	50	3	200	Low Temp, Low Condensing
R-507 HFC	50	3	200	Low Temp, Liquid Injected
R-507 HFC	50	3	200	Medium Temp, Liquid Injected
R-134a HFC	60	3	208/230	High Temperature
R-134a HFC	60	3	208/230	Low Temp, Liquid Injected
R-134a HFC	60	3	208/230	Medium Temp, Liquid Injected
R-22 HCFC	60	3	208/230	Low Temp, Liquid Injected
R-22 HCFC	60	3	208/230	Medium Temp, Liquid Injected
R-404A HFC	60	3	208/230	Low Temp, Low Condensing
R-404A HFC	60	3	208/230	Medium Temp, Liquid Injected
R-507 HFC	60	3	208/230	Low Temp, Low Condensing
R-507 HFC	60	3	208/230	Low Temp, Liquid Injected
R-507 HFC	60	3	208/230	Medium Temp, Liquid Injected

HFC, R-404A ,Mid Point, 60 Hz, 3 - Phase, 208/230 V

Medium Temp, Liquid Injected

Production Status: This compressor and/or application of this compressor is not available to U.S. OEM customers. A field replacement is currently available through a U.S. Emerson Climate Technologies Wholesaler. Please check with your local Emerson Climate Technologies Representative for international availability.

Performance

Evap(°F)/Cond(°F)	20/120	0/110
RG(°F)/Liq(°F)	65/120	65/110
Capacity (Btu/hr):	53500	39800
Power (Watts):	8000	6550
Current (Amps):	25.4	22.2
EER (Btu/Wh):	6.7	6.1
Mass Flow(lbs/hr):	1130	755
Sound Power (dBA):	86 Ave	91 Max
Vibration(mils(peak-peak)):	2.0 Ave	3.0 Max

Mechanical

Number of Cylinders:	0	CIR (ft ³ /hr):	7.319
Bore Size (in):	0.0	CFH (ft ³ /hr):	889.4634
Stroke (in):	0.0		
Overall Length (in):	12.44	Mounting Length (in):	8.65
Overall Width (in):	14.5	Mounting Width (in):	8.65
Overall Height (in):	21.34	Mounting Height (in):	22.09*
Suction Size(in):	1 3/4	Rotalock	
Discharge Size (in):	1 1/4	Rotalock	
Initial Oil Charge (oz):	140		
Oil Recharge (oz):	137		
Net Weight (lbs):	221.0		
HorsePower			
* Overall compressor height on Copeland Brand Product's specified mounting grommets.			

Electrical

LRA-High*:	189.0	UL File No.:	SA-9747	Max Operating Current(Amps):	33.5
LRA-Low*:		UL File Date:	12-Jul-1994	MCC (Amps):	42.0
LRA-Half Winding:	169.0	CSA File No.:	LR101508	RPM:	3500
RLA (=MCC/1.4; use for contactor selection):	30				
RLA (=MCC/1.56; use for breaker & wire size selection):	26.9				
*Low and High refer to the low and high nominal voltage ranges for which the motor is approved.					

Alternate Applications

Refrigerant	Frequency(Hz)	Phase	Voltage	Application
R-134a HFC	50	3	200	High Temperature
R-134a HFC	50	3	200	Low Temp, Liquid Injected
R-134a HFC	50	3	200	Medium Temp, Liquid Injected
R-22 HCFC	50	3	200	Low Temp, Liquid Injected
R-22 HCFC	50	3	200	Medium Temp, Liquid Injected
R-404A HFC	50	3	200	Low Temp, Low Condensing
R-404A HFC	50	3	200	Low Temp, Liquid Injected
R-404A HFC	50	3	200	Medium Temp, Liquid Injected
R-507 HFC	50	3	200	Low Temp, Low Condensing
R-507 HFC	50	3	200	Low Temp, Liquid Injected
R-507 HFC	50	3	200	Medium Temp, Liquid Injected
R-134a HFC	60	3	208/230	High Temperature
R-134a HFC	60	3	208/230	Low Temp, Liquid Injected
R-134a HFC	60	3	208/230	Medium Temp, Liquid Injected
R-22 HCFC	60	3	208/230	Low Temp, Liquid Injected
R-22 HCFC	60	3	208/230	Medium Temp, Liquid Injected
R-404A HFC	60	3	208/230	Low Temp, Low Condensing
R-404A HFC	60	3	208/230	Low Temp, Liquid Injected
R-507 HFC	60	3	208/230	Low Temp, Low Condensing
R-507 HFC	60	3	208/230	Low Temp, Liquid Injected
R-507 HFC	60	3	208/230	Medium Temp, Liquid Injected

HFC, R-507 ,Mid Point, 60 Hz, 3 - Phase, 208/230 V

Low Temp, Liquid Injected

Production Status: Available for sale to all U.S. customers. Please check with your local Emerson Climate Technologies Representative for international availability.

Performance

Evap(°F)/Cond(°F)	-25/105	-40/105
RG(°F)/Liq(°F)	65/105	65/105
Capacity (Btu/hr):	23700	16000
Power (Watts):	5350	4910
Current (Amps):	19.7	18.9
EER (Btu/Wh):	4.4	3.3
Mass Flow(lbs/hr):	438	293
Sound Power (dBA):	86 Ave	91 Max
Vibration(mils(peak-peak)):	2.0 Ave	3.0 Max

Mechanical

Number of Cylinders:	0	CIR (ft ³ /hr):	7.319
Bore Size (in):	0.0	CFH (ft ³ /hr):	889.4634
Stroke (in):	0.0		
Overall Length (in):	12.44	Mounting Length (in):	8.65
Overall Width (in):	14.5	Mounting Width (in):	8.65
Overall Height (in):	21.34	Mounting Height (in):	22.09*
Suction Size(in):	1 3/4	Rotalock	
Discharge Size (in):	1 1/4	Rotalock	
Initial Oil Charge (oz):	140		
Oil Recharge (oz):	137		
Net Weight (lbs):	221.0		
HorsePower	7.5		
* Overall compressor height on Copeland Brand Product's specified mounting grommets.			

Electrical

LRA-High*:	189.0	UL File No.:	SA-9747	Max Operating Current(Amps):	33.5
LRA-Low*:		UL File Date:	12-Jul-1994	MCC (Amps):	36.5
LRA-Half Winding:	169.0	CSA File No.:	LR101508	RPM:	3500
RLA (=MCC/1.4; use for contactor selection):	26.1				
RLA (=MCC/1.56; use for breaker & wire size selection):	23.4				
*Low and High refer to the low and high nominal voltage ranges for which the motor is approved.					

Alternate Applications

Refrigerant	Frequency(Hz)	Phase	Voltage	Application
R-134a HFC	50	3	200	High Temperature
R-134a HFC	50	3	200	Low Temp, Liquid Injected
R-134a HFC	50	3	200	Medium Temp, Liquid Injected
R-22 HCFC	50	3	200	Low Temp, Liquid Injected
R-22 HCFC	50	3	200	Medium Temp, Liquid Injected
R-404A HFC	50	3	200	Low Temp, Low Condensing
R-404A HFC	50	3	200	Low Temp, Liquid Injected
R-404A HFC	50	3	200	Medium Temp, Liquid Injected
R-507 HFC	50	3	200	Low Temp, Low Condensing
R-507 HFC	50	3	200	Low Temp, Liquid Injected
R-507 HFC	50	3	200	Medium Temp, Liquid Injected
R-134a HFC	60	3	208/230	High Temperature
R-134a HFC	60	3	208/230	Low Temp, Liquid Injected
R-134a HFC	60	3	208/230	Medium Temp, Liquid Injected
R-22 HCFC	60	3	208/230	Low Temp, Liquid Injected
R-22 HCFC	60	3	208/230	Medium Temp, Liquid Injected
R-404A HFC	60	3	208/230	Low Temp, Low Condensing
R-404A HFC	60	3	208/230	Low Temp, Liquid Injected
R-404A HFC	60	3	208/230	Medium Temp, Liquid Injected
R-507 HFC	60	3	208/230	Low Temp, Low Condensing
R-507 HFC	60	3	208/230	Medium Temp, Liquid Injected

HFC, R-507 ,Mid Point, 60 Hz, 3 - Phase, 208/230 V

Medium Temp, Liquid Injected

Production Status: This compressor and/or application of this compressor is not available to U.S. OEM customers. A field replacement is currently available through a U.S. Emerson Climate Technologies Wholesaler. Please check with your local Emerson Climate Technologies Representative for international availability.

Performance

Evap(°F)/Cond(°F)	20/120	0/110
RG(°F)/Liq(°F)	65/120	65/110
Capacity (Btu/hr):	53500	39800
Power (Watts):	8000	6550
Current (Amps):	25.4	22.2
EER (Btu/Wh):	6.7	6.1
Mass Flow(lbs/hr):	1170	775
Sound Power (dBA):	86 Ave	91 Max
Vibration(mils(peak-peak)):	2.0 Ave	3.0 Max

Mechanical

Number of Cylinders:	0	CIR (ft ³ /hr):	7.319
Bore Size (in):	0.0	CFH (ft ³ /hr):	889.4634
Stroke (in):	0.0		
Overall Length (in):	12.44	Mounting Length (in):	8.65
Overall Width (in):	14.5	Mounting Width (in):	8.65
Overall Height (in):	21.34	Mounting Height (in):	22.09*
Suction Size(in):	1 3/4	Rotalock	
Discharge Size (in):	1 1/4	Rotalock	
Initial Oil Charge (oz):	140		
Oil Recharge (oz):	137		
Net Weight (lbs):	221.0		
HorsePower			
* Overall compressor height on Copeland Brand Product's specified mounting grommets.			

Electrical

LRA-High*:	189.0	UL File No.:	SA-9747	Max Operating Current(Amps):	33.5
LRA-Low*:		UL File Date:	12-Jul-1994	MCC (Amps):	42.0
LRA-Half Winding:	169.0	CSA File No.:	LR101508	RPM:	3500
RLA (=MCC/1.4; use for contactor selection):	30				
RLA (=MCC/1.56; use for breaker & wire size selection):	26.9				
*Low and High refer to the low and high nominal voltage ranges for which the motor is approved.					

Alternate Applications

Refrigerant	Frequency(Hz)	Phase	Voltage	Application
R-134a HFC	50	3	200	High Temperature
R-134a HFC	50	3	200	Low Temp, Liquid Injected
R-134a HFC	50	3	200	Medium Temp, Liquid Injected
R-22 HCFC	50	3	200	Low Temp, Liquid Injected
R-22 HCFC	50	3	200	Medium Temp, Liquid Injected
R-404A HFC	50	3	200	Low Temp, Low Condensing
R-404A HFC	50	3	200	Low Temp, Liquid Injected
R-404A HFC	50	3	200	Medium Temp, Liquid Injected
R-507 HFC	50	3	200	Low Temp, Low Condensing
R-507 HFC	50	3	200	Low Temp, Liquid Injected
R-507 HFC	50	3	200	Medium Temp, Liquid Injected
R-134a HFC	60	3	208/230	High Temperature
R-134a HFC	60	3	208/230	Low Temp, Liquid Injected
R-134a HFC	60	3	208/230	Medium Temp, Liquid Injected
R-22 HCFC	60	3	208/230	Low Temp, Liquid Injected
R-22 HCFC	60	3	208/230	Medium Temp, Liquid Injected
R-404A HFC	60	3	208/230	Low Temp, Low Condensing
R-404A HFC	60	3	208/230	Low Temp, Liquid Injected
R-404A HFC	60	3	208/230	Medium Temp, Liquid Injected
R-507 HFC	60	3	208/230	Low Temp, Low Condensing
R-507 HFC	60	3	208/230	Low Temp, Liquid Injected

RATING CONDITIONS

65 °F Return Gas
0 °F Subcooling
95 °F Ambient Air Over

60 Hz Operation**LOW****TEMPERATURE**

HFCs Require Use of Polyol Ester
Lubricant Approved by Bulletin
AE-1248

ZF24K4E-TWC

HCFC-22
COPELAND SCROLL™
TWC 208/230-3-60

Liquid Injection**Condensing Temperature °F****(Sat Dew Pt Pressure, psig)****Evaporating Temperature °F (Sat Dew Pt Pressure, psig)**

		130 (297)	-40 (0.5)	-35 (2.6)	-30 (4.9)	-25 (7.4)	-20 (10)	-15 (13)	-10 (16)	-5 (20)	0 (24)
120 (260)	C	13100	15000	17000	19200	21600	24200	27100	30300	33700	
	P	5550	5800	6100	6300	6550	6750	6950	7150	7350	
	A	20	20.6	21.1	21.6	22.1	22.6	23	23.5	23.9	
	M	196	224	254	287	324	364	408	457	510	
	E	2.4	2.6	2.8	3	3.3	3.6	3.9	4.2	4.6	
	%	45.3	46.5	47.8	49.1	50.5	51.9	53.2	54.4	55.6	
110 (226)	C	13800	15800	17900	20200	22800	25600	28700	32100	35800	
	P	5350	5550	5750	5950	6150	6300	6500	6650	6800	
	A	19.5	20	20.4	20.8	21.2	21.6	22	22.3	22.7	
	M	196	224	255	288	326	367	412	462	515	
	E	2.6	2.8	3.1	3.4	3.7	4.1	4.4	4.8	5.3	
	%	44.7	46.3	47.9	49.5	51.1	52.6	54	55.4	56.6	
105 (211)	C	14500	16600	18800	21300	24000	27000	30300	33900	37800	
	P	5100	5250	5450	5600	5750	5900	6000	6150	6300	
	A	19	19.4	19.7	20.1	20.4	20.7	21	21.3	21.6	
	M	197	225	256	290	328	370	416	466	520	
	E	2.8	3.1	3.5	3.8	4.2	4.6	5	5.5	6	
	%	44.6	46.4	48.2	50	51.7	53.3	54.8	56.1	57.2	
100 (196)	C	14900	17000	19300	21800	24600	27700	31100	34800	38800	
	P	4960	5100	5250	5400	5550	5650	5800	5950	6050	
	A	18.8	19.1	19.4	19.7	20	20.2	20.5	20.8	21.1	
	M	198	226	257	291	329	371	417	468	525	
	E	3	3.3	3.7	4	4.4	4.9	5.4	5.9	6.4	
	%	44.7	46.6	48.5	50.3	52	53.6	55.1	56.4	57.4	
90 (168)	C	15300	17400	19800	22300	25200	28400	31800	35600	39800	
	P	4820	4950	5100	5200	5300	5450	5550	5700	5850	
	A	18.5	18.8	19.1	19.3	19.6	19.8	20.1	20.3	20.6	
	M	199	227	258	292	330	372	419	470	525	
	E	3.2	3.5	3.9	4.3	4.7	5.2	5.7	6.3	6.8	
	%	44.9	46.8	48.7	50.6	52.3	54	55.4	56.6	57.5	
80 (144)	C	16000	18200	20700	23400	26400	29700	33300	37300	41700	
	P	4500	4600	4700	4800	4900	5000	5100	5250	5350	
	A	18	18.2	18.4	18.6	18.8	19	19.2	19.4	19.7	
	M	201	228	259	294	332	375	421	473	530	
	E	3.6	4	4.4	4.9	5.4	5.9	6.5	7.1	7.8	
	%	45.5	47.5	49.4	51.3	53	54.5	55.7	56.6	57.2	
70 (121)	C	16800	19000	21600	24400	27500	30900	34700	38900	43500	
	P	4150	4220	4300	4390	4480	4570	4680	4800	4930	
	A	17.4	17.5	17.7	17.8	18	18.2	18.3	18.6	18.8	
	M	202	230	261	295	333	376	423	474	530	
	E	4	4.5	5	5.6	6.1	6.8	7.4	8.1	8.8	
	%	46.5	48.5	50.3	52	53.5	54.8	55.6	56.1	56.2	
70 (121)	C	17500	19800	22400	25300	28500	32100	36000	40400	45200	
	P	3750	3820	3880	3960	4040	4140	4250	4370	4510	
	A	16.8	16.8	16.9	17.1	17.2	17.3	17.5	17.7	18	
	M	204	231	261	295	333	376	423	474	530	
	E	4.7	5.2	5.8	6.4	7.1	7.8	8.5	9.2	10	
	%	48	49.8	51.4	52.8	54	54.8	55.1	55	54.3	

Nominal Performance Values (±5%) based on 72 hours run-in. Subject to change without notice.

C:Capacity(Btu/hr), P:Power(Watts), A:Current(Amps), M:Mass Flow(lbs/hr), E:EER(Btu/Watt-hr), %:Isentropic Efficiency(%)

RATING CONDITIONS

65 °F Return Gas
0 °F Subcooling
95 °F Ambient Air Over

60 Hz Operation**MEDIUM****TEMPERATURE**

HFCs Require Use of Polyol Ester
Lubricant Approved by Bulletin
AE-1248

ZF24K4E-TWC

HCFC-22
COPELAND SCROLL™
TWC 208/230-3-60

Condensing Temperature °F
(Sat Dew Pt Pressure, psig)

Liquid Injection**Evaporating Temperature °F (Sat Dew Pt Pressure, psig)**

	140 (337)	-10 (16)	-5 (20)	0 (24)	5 (28)	10 (33)	15 (38)	20 (43)	25 (49)	30 (55)	35 (61)	40 (68)	45 (76)
C										58000	64000	70500	77000
P										9100	9300	9550	9750
A										28.1	28.6	29.1	29.6
M										955	1060	1170	1290
E										6.4	6.9	7.4	7.9
%										60.2	60.6	60.7	60.5
130													
C	27100	30300	33700	37500	41600	46200	51000	56500	62000	68500	75000	82500	
P	6950	7150	7350	7550	7700	7900	8050	8250	8450	8650	8850	9050	
A	23	23.5	23.9	24.3	24.7	25.1	25.6	26	26.5	26.9	27.4	27.9	
M	408	457	510	570	635	705	785	870	965	1070	1180	1300	
E	3.9	4.2	4.6	5	5.4	5.9	6.3	6.8	7.4	7.9	8.5	9.1	
%	53.2	54.5	55.7	56.8	57.9	58.8	59.6	60.1	60.4	60.4	60.1	59.5	
120													
C	28700	32100	35800	39900	44300	49100	54500	60000	66000	73000	80000	87500	
P	6500	6650	6800	7000	7150	7300	7500	7650	7850	8050	8250	8500	
A	22	22.3	22.7	23.1	23.4	23.8	24.2	24.6	25	25.5	26	26.5	
M	412	461	515	575	640	715	795	880	975	1080	1190	1320	
E	4.4	4.8	5.3	5.7	6.2	6.7	7.3	7.8	8.4	9.1	9.7	10.3	
%	54	55.3	56.6	57.7	58.6	59.4	59.8	60	59.9	59.5	58.6	57.4	
110													
C	30300	33900	37800	42200	46900	52000	57500	63500	70000	77000	84500	92500	
P	6000	6150	6300	6450	6600	6750	6950	7100	7300	7500	7750	8000	
A	21	21.3	21.6	21.9	22.3	22.6	23	23.4	23.8	24.3	24.8	25.3	
M	415	466	520	580	650	725	805	890	985	1090	1200	1330	
E	5	5.5	6	6.5	7.1	7.7	8.3	8.9	9.6	10.3	10.9	11.6	
%	54.7	56.1	57.3	58.2	58.9	59.3	59.4	59.1	58.5	57.4	55.9	53.5	
105													
C	31100	34800	38800	43300	48100	53500	59000	65500	72000	79000	87000	95000	
P	5800	5950	6050	6200	6350	6500	6700	6850	7050	7300	7500	7750	
A	20.5	20.8	21.1	21.4	21.7	22.1	22.4	22.8	23.3	23.7	24.2	24.8	
M	417	468	525	585	655	725	805	895	990	1100	1210	1330	
E	5.4	5.9	6.4	7	7.6	8.2	8.8	9.5	10.2	10.9	11.6	12.3	
%	55.1	56.4	57.5	58.3	58.8	59	58.8	58.3	57.3	55.9	54	51.7	
100													
C	31800	35600	39800	44400	49300	55000	60500	67000	74000	81000	89000	97500	
P	5550	5700	5850	5950	6100	6250	6450	6650	6850	7050	7300	7550	
A	20.1	20.3	20.6	20.9	21.2	21.5	21.9	22.3	22.8	23.2	23.8	24.3	
M	419	470	525	590	655	730	810	900	995	1100	1210	1340	
E	5.7	6.3	6.8	7.4	8.1	8.7	9.4	10.1	10.8	11.5	12.2	12.9	
%	55.4	56.6	57.6	58.2	58.5	58.5	58	57.1	55.8	54	51.8	49.1	
90													
C	33300	37300	41700	46500	51500	57500	63500	70000	77500	85000	93500	102000	
P	5100	5250	5350	5500	5650	5800	6000	6200	6450	6700	6950	7250	
A	19.2	19.4	19.7	19.9	20.3	20.6	21	21.4	21.9	22.4	22.9	23.6	
M	421	473	530	595	660	735	815	905	1000	1110	1220	1340	
E	6.5	7.1	7.8	8.5	9.1	9.9	10.6	11.3	12	12.7	13.4	14.1	
%	55.7	56.7	57.3	57.5	57.3	56.6	55.5	53.9	51.8	49.2	46.1	42.7	
80													
C	34700	38900	43500	48500	54000	60000	66500	73500	81000	89000	97500		
P	4680	4800	4930	5050	5250	5400	5600	5850	6100	6400	6700		
A	18.3	18.6	18.8	19.1	19.4	19.8	20.2	20.6	21.1	21.7	22.3		
M	422	475	530	595	665	740	820	910	1010	1110	1230		
E	7.4	8.1	8.8	9.6	10.3	11.1	11.8	12.5	13.2	13.9	14.6		
%	55.6	56.2	56.3	56	55	53.6	51.7	49.2	46.2	42.8	39		
70													
C	36000	40400	45200	50500	56000	62500	69000	76000	84000	92500			
P	4250	4370	4510	4670	4860	5050	5300	5550	5850	6150			
A	17.5	17.7	18	18.3	18.6	19	19.5	20	20.5	21.2			
M	421	474	530	595	665	740	820	910	1010	1110			
E	8.5	9.2	10	10.8	11.5	12.3	13	13.7	14.4	15			
%	54.9	55	54.4	53.2	51.5	49.2	46.3	43	39.2	35			

Nominal Performance Values (±5%) based on 72 hours run-in. Subject to change without notice.

C:Capacity(Btu/hr), P:Power(Watts), A:Current(Amps), M:Mass Flow(lbs/hr), E:EER(Btu/Watt-hr), %:Isentropic Efficiency(%)

RATING CONDITIONS

65 °F Return Gas
0 °F Subcooling
95 °F Ambient Air Over

60 Hz Operation**LOW****TEMPERATURE**

HFCs Require Use of Polyol Ester
Lubricant Approved by Bulletin
AE-1248

ZF24K4E-TWC**HFC-134A****COPELAND SCROLL™****TWC 208/230-3-60****Liquid Injection****Condensing Temperature °F****(Sat Dew Pt Pressure, psig)****Evaporating Temperature °F (Sat Dew Pt Pressure, psig)**

	130	-40	(-7.3	-35	(-6.1	-30	(-4.8	-25	(-3.4	-20	(-1.8	-15	(0)	-10	(1.9)	-5	(4.1)	0	(6.5)
(199) C	7080	8270					9540	10900					12400	14100	15900	17900	20200		
P	3390	3520					3640	3760					3880	4000	4120	4240	4360		
A	16.2	16.4					16.6	16.7					16.9	17.1	17.3	17.5	17.8		
M	117	137					158	181					206	234	265	300	338		
E	2.1	2.3					2.6	2.9					3.2	3.5	3.9	4.2	4.6		
%	39.1	41.7					44	46.2					48.3	50.3	52.2	54	55.8		
120 C	7480	8750					10100	11600					13200	15000	17000	19200	21700		
(171) P	3230	3340					3450	3550					3650	3750	3860	3960	4070		
A	16	16.1					16.3	16.4					16.6	16.7	16.9	17.1	17.3		
M	117	136					158	181					207	236	267	303	342		
E	2.3	2.6					2.9	3.3					3.6	4	4.4	4.9	5.3		
%	39.1	41.8					44.3	46.6					48.8	50.9	52.9	54.9	56.6		
110 C	7930	9280					10700	12300					14100	16000	18100	20500	23100		
(146) P	3040	3150					3240	3340					3430	3520	3610	3700	3790		
A	15.7	15.9					16	16.1					16.2	16.4	16.5	16.6	16.8		
M	117	137					158	182					208	237	269	305	345		
E	2.6	2.9					3.3	3.7					4.1	4.5	5	5.5	6.1		
%	39.5	42.2					44.8	47.1					49.4	51.5	53.5	55.4	57.1		
105 C	8170	9540					11000	12700					14500	16500	18700	21100	23900		
(135) P	2950	3040					3140	3220					3310	3400	3480	3570	3660		
A	15.6	15.7					15.9	16					16.1	16.2	16.3	16.5	16.6		
M	117	137					159	182					209	238	270	306	347		
E	2.8	3.1					3.5	3.9					4.4	4.8	5.4	5.9	6.5		
%	39.8	42.5					45	47.4					49.6	51.7	53.7	55.5	57.1		
100 C	8400	9800					11300	13000					14900	16900	19200	21800	24600		
(124) P	2840	2940					3030	3110					3200	3280	3360	3450	3530		
A	15.5	15.6					15.7	15.8					15.9	16	16.1	16.3	16.4		
M	117	137					159	183					209	238	271	307	348		
E	3	3.3					3.7	4.2					4.7	5.2	5.7	6.3	6.9		
%	40.2	42.9					45.3	47.6					49.8	51.9	53.8	55.5	57		
90 C	8840	10300					11900	13700					15600	17800	20200	22900	25900		
(104) P	2620	2710					2800	2880					2960	3040	3110	3200	3280		
A	15.3	15.4					15.4	15.5					15.6	15.7	15.8	15.9	16.1		
M	118	137					159	183					209	239	271	308	349		
E	3.4	3.8					4.3	4.7					5.3	5.9	6.5	7.2	7.9		
%	41.2	43.7					46	48.2					50.2	52	53.7	55.2	56.4		
80 C	9220	10700					12400	14200					16300	18600	21100	23900	27000		
(87) P	2370	2460					2540	2630					2700	2780	2860	2940	3030		
A	15	15.1					15.1	15.2					15.3	15.4	15.5	15.6	15.7		
M	117	137					158	182					208	238	271	307	348		
E	3.9	4.4					4.9	5.4					6	6.7	7.4	8.1	8.9		
%	42.6	44.8					46.9	48.7					50.4	51.9	53.3	54.3	55.1		
70 C	9490	11000					12700	14600					16800	19200	21800	24800	28000		
(71) P	2080	2180					2270	2350					2430	2520	2600	2680	2770		
A	14.6	14.7					14.8	14.9					15	15.1	15.2	15.3	15.4		
M	116	135					156	180					206	235	268	305	346		
E	4.6	5.1					5.6	6.2					6.9	7.6	8.4	9.2	10.1		
%	44.5	46.4					48	49.4					50.6	51.7	52.4	52.9	53.1		

Nominal Performance Values (±5%) based on 72 hours run-in. Subject to change without notice.

C:Capacity(Btu/hr), P:Power(Watts), A:Current(Amps), M:Mass Flow(lbs/hr), E:EER(Btu/Watt-hr), %:Isentropic Efficiency(%)

RATING CONDITIONS

65 °F Return Gas
0 °F Subcooling
95 °F Ambient Air Over

60 Hz Operation**MEDIUM****TEMPERATURE**

HFCs Require Use of Polyol Ester
Lubricant Approved by Bulletin
AE-1248

ZF24K4E-TWC**HFC-134A****COPELAND SCROLL™****TWC 208/230-3-60****Liquid Injection**

Condensing Temperature °F
(Sat Dew Pt Pressure, psig)

Evaporating Temperature °F (Sat Dew Pt Pressure, psig)

	140 (229)	-10 (1.9)	-5 (4.1)	0 (6.5)	5 (9.1)	10 (12)	15 (15)	20 (18)	25 (22)	30 (26)	35 (30)	40 (35)	45 (40)
130 C					21000	23500	26400	29500	33000	36900	41100	45800	51000
P					4810	4960	5100	5300	5450	5650	5850	6050	6300
A					18.6	18.9	19.2	19.6	19.9	20.3	20.7	21.1	21.5
M					377	424	478	535	605	680	760	850	950
E					4.4	4.7	5.2	5.6	6	6.5	7	7.6	8.1
%					56.1	57.6	59.1	60.3	61.3	62.1	62.6	62.7	62.5
130 C	15900	17900	20200	22700	25500	28600	32000	35800	39900	44500	49500	55000	
P	4120	4240	4360	4480	4610	4750	4900	5050	5200	5400	5600	5800	
A	17.3	17.5	17.8	18	18.3	18.5	18.8	19.1	19.4	19.8	20.2	20.6	
M	265	300	338	381	430	483	545	610	685	765	855	955	
E	3.9	4.2	4.6	5.1	5.5	6	6.5	7.1	7.6	8.2	8.8	9.5	
%	52.2	54	55.7	57.4	58.9	60.2	61.3	62.2	62.7	62.9	62.7	62	
120 C	17000	19200	21700	24400	27400	30700	34400	38500	42900	47800	53000	59000	
P	3860	3960	4070	4180	4300	4420	4550	4690	4850	5000	5200	5400	
A	16.9	17.1	17.3	17.5	17.7	17.9	18.1	18.4	18.7	19	19.3	19.7	
M	268	303	342	386	434	489	550	615	690	775	865	960	
E	4.4	4.9	5.3	5.8	6.4	7	7.6	8.2	8.9	9.5	10.2	10.9	
%	53	54.9	56.6	58.2	59.6	60.8	61.7	62.3	62.5	62.3	61.6	60.5	
110 C	18100	20500	23100	26100	29300	32900	36800	41100	45800	51000	56500	62500	
P	3610	3700	3790	3890	4000	4110	4230	4370	4510	4660	4830	5000	
A	16.5	16.6	16.8	17	17.2	17.4	17.6	17.8	18.1	18.4	18.7	19	
M	269	305	345	390	439	494	555	620	695	780	870	965	
E	5	5.5	6.1	6.7	7.3	8	8.7	9.4	10.2	10.9	11.7	12.5	
%	53.5	55.4	57.1	58.5	59.7	60.7	61.3	61.4	61.2	60.5	59.4	57.7	
105 C	18700	21100	23900	26900	30200	33900	37900	42400	47200	52500	58500	64500	
P	3480	3570	3660	3760	3860	3970	4090	4210	4350	4500	4660	4840	
A	16.3	16.5	16.6	16.8	16.9	17.1	17.3	17.6	17.8	18.1	18.4	18.7	
M	270	306	347	391	441	496	555	625	700	780	870	970	
E	5.4	5.9	6.5	7.2	7.8	8.5	9.3	10.1	10.9	11.7	12.5	13.3	
%	53.7	55.5	57.1	58.5	59.5	60.3	60.6	60.6	60.1	59.2	57.7	55.7	
100 C	19200	21800	24600	27700	31100	34900	39100	43600	48600	54000	60000	66500	
P	3360	3450	3530	3630	3730	3830	3950	4070	4200	4350	4510	4690	
A	16.1	16.3	16.4	16.6	16.7	16.9	17.1	17.3	17.6	17.8	18.1	18.4	
M	271	307	348	393	442	497	560	625	700	780	870	970	
E	5.7	6.3	6.9	7.6	8.4	9.1	9.9	10.7	11.6	12.4	13.3	14.2	
%	53.7	55.5	57	58.2	59.1	59.6	59.8	59.5	58.8	57.5	55.7	53.3	
90 C	20200	22900	25900	29200	32800	36800	41200	46000	51500	57000	63000	70000	
P	3110	3200	3280	3370	3460	3570	3680	3800	3930	4070	4230	4400	
A	15.8	15.9	16.1	16.2	16.3	16.5	16.7	16.9	17.1	17.4	17.6	17.9	
M	271	308	349	394	444	499	560	630	700	785	875	970	
E	6.5	7.2	7.9	8.7	9.5	10.3	11.2	12.1	13	14	14.9	15.9	
%	53.6	55.2	56.4	57.3	57.7	57.7	57.3	56.4	55	53	50.4	47.3	
80 C	21100	23900	27000	30500	34300	38500	43100	48200	53500	59500	66000		
P	2860	2940	3030	3120	3210	3320	3430	3550	3680	3820	3980		
A	15.5	15.6	15.7	15.8	16	16.1	16.3	16.5	16.7	17	17.2		
M	270	307	349	394	444	500	560	630	700	785	870		
E	7.4	8.1	8.9	9.8	10.7	11.6	12.6	13.6	14.6	15.6	16.6		
%	53.1	54.3	55.1	55.4	55.3	54.7	53.6	52	49.8	47	43.6		
70 C	21800	24800	28000	31700	35700	40100	44900	50000	56000	62000			
P	2600	2680	2770	2870	2970	3070	3190	3310	3450	3600			
A	15.2	15.3	15.4	15.5	15.7	15.8	16	16.2	16.4	16.6			
M	267	305	346	392	442	497	560	625	700	780			
E	8.4	9.2	10.1	11	12	13	14.1	15.1	16.2	17.3			
%	52.2	52.9	53.1	52.8	52	50.6	48.7	46.1	43	39.3			

Nominal Performance Values (±5%) based on 72 hours run-in. Subject to change without notice.

C:Capacity(Btu/hr), P:Power(Watts), A:Current(Amps), M:Mass Flow(lbs/hr), E:EER(Btu/Watt-hr), %:Isentropic Efficiency(%)

RATING CONDITIONS

65 °F Return Gas
0 °F Subcooling
95 °F Ambient Air Over

60 Hz Operation**LOW****TEMPERATURE**

HFCs Require Use of Polyol Ester
Lubricant Approved by Bulletin
AE-1248

ZF24K4E-TWC**HFC-404A****COPELAND SCROLL™****TWC 208/230-3-60****Liquid Injection****Condensing Temperature °F****(Sat Dew Pt Pressure, psig)****Evaporating Temperature °F (Sat Dew Pt Pressure, psig)**

	140 (402)	-40 (4.5)	-35 (7.1)	-30 (9.9)	-25 (13)	-20 (16)	-15 (20)	-10 (24)	-5 (28)	0 (33)
C										27900
P										8150
A										25.8
M										710
E										3.4
%										57.8
130										
C	12400	14400	16500	18600	20900	23400	26100	29000	32100	
P	5650	5900	6150	6350	6600	6850	7100	7350	7600	
A	20.2	20.7	21.2	21.8	22.3	22.9	23.4	24	24.5	
M	274	318	364	413	466	525	585	655	730	
E	2.2	2.4	2.7	2.9	3.2	3.4	3.7	3.9	4.2	
%	48.1	50.8	52.9	54.6	56.1	57.3	58.3	59.2	60	
120										
C	14000	16100	18400	20800	23400	26200	29300	32500	36100	
P	5350	5550	5750	5950	6200	6400	6600	6850	7050	
A	19.7	20.1	20.5	20.9	21.4	21.8	22.3	22.8	23.3	
M	280	324	370	420	474	535	595	665	745	
E	2.6	2.9	3.2	3.5	3.8	4.1	4.4	4.8	5.1	
%	49.5	52.3	54.6	56.4	57.9	59.2	60.2	61.1	61.7	
110										
C	15400	17700	20100	22800	25700	28800	32200	35800	39800	
P	5050	5200	5400	5550	5750	5950	6150	6350	6550	
A	19.1	19.4	19.7	20.1	20.5	20.9	21.3	21.7	22.2	
M	284	327	374	425	479	540	605	675	755	
E	3	3.4	3.7	4.1	4.5	4.8	5.2	5.6	6.1	
%	50.6	53.6	55.9	57.9	59.5	60.7	61.7	62.5	63	
105										
C	16000	18400	21000	23700	26700	30000	33500	37400	41600	
P	4910	5050	5200	5350	5550	5700	5900	6100	6300	
A	18.9	19.1	19.4	19.7	20	20.4	20.8	21.2	21.7	
M	285	328	375	426	481	540	605	680	760	
E	3.3	3.6	4	4.4	4.8	5.3	5.7	6.1	6.6	
%	51.1	54.1	56.5	58.5	60.1	61.4	62.3	63	63.4	
100										
C	16600	19100	21700	24600	27700	31200	34900	38900	43300	
P	4740	4870	5000	5150	5300	5500	5650	5850	6050	
A	18.6	18.8	19	19.3	19.6	19.9	20.3	20.7	21.1	
M	285	329	376	427	482	545	610	680	765	
E	3.5	3.9	4.3	4.8	5.2	5.7	6.1	6.6	7.1	
%	51.6	54.6	57.1	59	60.6	61.9	62.8	63.3	63.6	
90										
C	17700	20400	23200	26300	29700	33300	37400	41700	46500	
P	4420	4510	4630	4760	4900	5050	5250	5400	5600	
A	18	18.1	18.3	18.5	18.8	19.1	19.4	19.8	20.2	
M	286	329	376	427	483	545	610	685	770	
E	4	4.5	5	5.5	6.1	6.6	7.1	7.7	8.3	
%	52.3	55.4	57.9	59.9	61.4	62.5	63.2	63.5	63.4	
80										
C	18800	21600	24600	27800	31500	35400	39700	44400	49600	
P	4090	4170	4260	4370	4510	4650	4820	5000	5200	
A	17.4	17.5	17.6	17.8	18	18.3	18.6	18.9	19.3	
M	286	329	376	427	483	545	615	690	770	
E	4.6	5.2	5.8	6.4	7	7.6	8.2	8.9	9.5	
%	53	56	58.5	60.3	61.7	62.5	62.9	62.8	62.3	
70										
C	19800	22700	25900	29300	33200	37400	42000	47000	52500	
P	3780	3830	3910	4020	4140	4280	4450	4630	4830	
A	16.9	16.9	17	17.1	17.3	17.6	17.8	18.2	18.6	
M	286	328	375	426	482	545	615	690	775	
E	5.3	5.9	6.6	7.3	8	8.7	9.4	10.2	10.9	
%	53.5	56.4	58.7	60.3	61.3	61.8	61.7	61	59.9	

Nominal Performance Values (±5%) based on 72 hours run-in. Subject to change without notice.

C:Capacity(Btu/hr), P:Power(Watts), A:Current(Amps), M:Mass Flow(lbs/hr), E:EER(Btu/Watt-hr), %:Isentropic Efficiency(%)

RATING CONDITIONS

65 °F Return Gas
0 °F Subcooling
95 °F Ambient Air Over

60 Hz Operation**MEDIUM****TEMPERATURE**

HFCs Require Use of Polyol Ester
Lubricant Approved by Bulletin
AE-1248

ZF24K4E-TWC**HFC-404A****COPELAND SCROLL™****TWC 208/230-3-60**

Condensing Temperature °F
(Sat Dew Pt Pressure, psig)

Evaporating Temperature °F (Sat Dew Pt Pressure, psig)

	140	-10	(24)	-5	(28)	0	(33)	5	(38)	10	(44)	15	(49)	20	(56)	25	(63)	30	(70)	35	(78)	40	(86)	45	(95)
130 (402)	C						27900		30800		34000		37500		41300		45500		50000		55000		60500		66000
	P						8150		8450		8700		8950		9200		9450		9650		9900		10100		10300
	A						25.8		26.4		27.1		27.7		28.3		28.9		29.4		30		30.5		31
	M						710		790		880		980		1090		1210		1350		1490		1660		1840
	E						3.4		3.7		3.9		4.2		4.5		4.8		5.2		5.6		6		6.4
	%						57.8		58.5		59.2		59.9		60.6		61.2		61.7		62.1		62.4		62.4
130 (354)	C	26100		29000			32100		35600		39300		43300		47700		52500		57500		63500		69500		76000
	P	7100		7350			7600		7850		8100		8350		8550		8800		9000		9250		9450		9650
	A	23.4		24			24.5		25.1		25.7		26.2		26.8		27.3		27.9		28.4		28.9		29.4
	M	585		655			725		810		900		1000		1110		1230		1370		1520		1690		1870
	E	3.7		3.9			4.2		4.5		4.9		5.2		5.6		6		6.4		6.9		7.4		7.9
	%	58.3		59.1			59.8		60.4		61		61.5		61.9		62.2		62.3		62.4		62.1		61.7
120 (310)	C	29300		32500			36100		40000		44200		48800		53500		59000		65000		71000		78000		85500
	P	6600		6850			7050		7300		7550		7750		8000		8200		8400		8650		8850		9050
	A	22.3		22.8			23.3		23.9		24.4		24.9		25.4		25.9		26.4		26.9		27.4		27.9
	M	595		665			740		825		920		1020		1130		1260		1390		1540		1710		1890
	E	4.4		4.8			5.1		5.5		5.9		6.3		6.7		7.2		7.7		8.2		8.8		9.4
	%	60.2		61			61.6		62		62.3		62.5		62.6		62.5		62.2		61.7		60.9		59.9
110 (271)	C	32200		35800			39800		44100		48800		54000		59500		65500		72000		79000		86500		94500
	P	6150		6350			6550		6750		7000		7200		7450		7650		7850		8100		8300		8500
	A	21.3		21.7			22.2		22.7		23.2		23.6		24.1		24.6		25.2		25.7		26.2		26.6
	M	605		675			755		840		935		1040		1150		1280		1410		1570		1730		1910
	E	5.2		5.6			6.1		6.5		7		7.5		8		8.5		9.1		9.7		10.4		11.1
	%	61.7		62.5			62.9		63.2		63.2		63		62.6		62		61.1		60		58.6		56.9
105 (252)	C	33500		37400			41600		46100		51000		56500		62000		68500		75000		82500		90500		98500
	P	5900		6100			6300		6500		6750		6950		7150		7400		7600		7850		8050		8300
	A	20.8		21.2			21.7		22.1		22.6		23.1		23.6		24.1		24.6		25.1		25.6		26.1
	M	610		680			760		845		940		1040		1160		1290		1420		1580		1740		1920
	E	5.7		6.1			6.6		7.1		7.6		8.1		8.7		9.2		9.9		10.5		11.2		11.9
	%	62.4		63.1			63.4		63.5		63.3		62.9		62.2		61.3		60.1		58.7		56.9		54.8
100 (235)	C	34900		38900			43300		48000		53000		59000		65000		71500		78500		86000		94000		103000
	P	5650		5850			6050		6250		6500		6700		6950		7150		7400		7600		7850		8100
	A	20.3		20.7			21.1		21.6		22		22.5		23		23.5		24		24.5		25		25.6
	M	610		685			765		850		945		1050		1170		1290		1430		1580		1750		1930
	E	6.1		6.6			7.1		7.7		8.2		8.8		9.4		10		10.6		11.3		12		12.7
	%	62.8		63.5			63.7		63.6		63.2		62.5		61.6		60.3		58.8		57		54.8		52.3
90 (203)	C	37400		41700			46500		51500		57500		63500		70000		77000		84500		93000		102000		111000
	P	5250		5400			5600		5800		6050		6250		6500		6700		6950		7200		7450		7700
	A	19.4		19.8			20.2		20.6		21		21.5		22		22.5		23		23.6		24.1		24.7
	M	615		690			770		860		955		1060		1180		1310		1450		1600		1770		1950
	E	7.1		7.7			8.3		8.9		9.5		10.1		10.8		11.5		12.2		12.9		13.6		14.4
	%	63.3		63.7			63.6		63.1		62.2		60.9		59.3		57.3		55		52.4		49.5		46.1
80 (174)	C	39700		44400			49600		55000		61000		68000		75000		82500		91000		99500		109000		
	P	4820		5000			5200		5400		5600		5850		6100		6350		6600		6850		7150		
	A	18.6		18.9			19.3		19.7		20.2		20.7		21.2		21.7		22.2		22.8		23.4		
	M	610		690			775		865		965		1070		1190		1320		1460		1610		1780		
	E	8.2		8.9			9.5		10.2		10.9		11.6		12.3		13		13.7		14.5		15.3		
	%	62.8		62.9			62.4		61.3		59.8		57.8		55.4		52.7		49.6		46.2		42.4		
70 (148)	C	42000		47000			52500		58500		65000		72000		79500		88000		96500						
	P	4450		4630			4830		5050		5300		5500		5800		6050		6350						
	A	17.8		18.2			18.6		19		19.4		19.9		20.5		21		21.6						
	M	610		690			775		865		965		1070		1190		1320		1460						
	E	9.4		10.2			10.9		11.6		12.3		13		13.8		14.5		15.3						
	%	61.1		60.8			59.7		58		55.7		53		49.8		46.3		42.4						

Nominal Performance Values (±5%) based on 72 hours run-in. Subject to change without notice.

C:Capacity(Btu/hr), P:Power(Watts), A:Current(Amps), M:Mass Flow(lbs/hr), E:EER(Btu/Watt-hr), %:Isentropic Efficiency(%)

RATING CONDITIONS

65 °F Return Gas
0 °F Subcooling
95 °F Ambient Air Over

60 Hz Operation**LOW****TEMPERATURE**

HFCs Require Use of Polyol Ester
Lubricant Approved by Bulletin
AE-1248

ZF24K4E-TWC**HFC-507****COPELAND SCROLL™****TWC 208/230-3-60****Liquid Injection****Condensing Temperature °F****(Sat Dew Pt Pressure, psig)****Evaporating Temperature °F (Sat Dew Pt Pressure, psig)**

	140 (413)	-40 (5.7)	-35 (8.4)	-30 (11)	-25 (15)	-20 (18)	-15 (22)	-10 (26)	-5 (30)	0 (35)
C										27900
P										8150
A										25.8
M										745
E										3.4
%										58.9
130										
C	12400	14400	16500	18600	20900	23400	26100	29000	32100	
P	5650	5900	6150	6350	6600	6850	7100	7350	7600	
A	20.2	20.7	21.2	21.8	22.3	22.9	23.4	24	24.5	
M	285	330	377	429	484	545	610	680	760	
E	2.2	2.4	2.7	2.9	3.2	3.4	3.7	3.9	4.2	
%	48.7	51.3	53.4	55.1	56.6	57.9	59	59.9	60.7	
120										
C	14000	16100	18400	20800	23400	26200	29300	32500	36100	
P	5350	5550	5750	5950	6200	6400	6600	6850	7050	
A	19.7	20.1	20.5	20.9	21.4	21.8	22.3	22.8	23.3	
M	289	334	382	434	490	550	615	690	770	
E	2.6	2.9	3.2	3.5	3.8	4.1	4.4	4.8	5.1	
%	49.7	52.5	54.7	56.6	58.2	59.5	60.6	61.4	62.1	
110										
C	15400	17700	20100	22800	25700	28800	32200	35800	39800	
P	5050	5200	5400	5550	5750	5950	6150	6350	6550	
A	19.1	19.4	19.7	20.1	20.5	20.9	21.3	21.7	22.2	
M	292	337	385	437	494	555	625	695	780	
E	3	3.4	3.7	4.1	4.5	4.8	5.2	5.6	6.1	
%	50.7	53.6	56	57.9	59.6	60.9	61.9	62.6	63.1	
105										
C	16000	18400	21000	23700	26700	30000	33500	37400	41600	
P	4910	5050	5200	5350	5550	5700	5900	6100	6300	
A	18.9	19.1	19.4	19.7	20	20.4	20.8	21.2	21.7	
M	293	338	386	438	495	555	625	700	780	
E	3.3	3.6	4	4.4	4.8	5.3	5.7	6.1	6.6	
%	51.1	54.1	56.5	58.5	60.1	61.4	62.4	63.1	63.5	
100										
C	16600	19100	21700	24600	27700	31200	34900	38900	43300	
P	4740	4870	5000	5150	5300	5500	5650	5850	6050	
A	18.6	18.8	19	19.3	19.6	19.9	20.3	20.7	21.1	
M	293	338	386	439	496	560	625	700	785	
E	3.5	3.9	4.3	4.8	5.2	5.7	6.1	6.6	7.1	
%	51.5	54.5	57	59	60.7	61.9	62.8	63.4	63.6	
90										
C	17700	20400	23200	26300	29700	33300	37400	41700	46500	
P	4420	4510	4630	4760	4900	5050	5250	5400	5600	
A	18	18.1	18.3	18.5	18.8	19.1	19.4	19.8	20.2	
M	294	338	386	439	496	560	630	705	790	
E	4	4.5	5	5.5	6.1	6.6	7.1	7.7	8.3	
%	52.3	55.3	57.9	59.9	61.4	62.5	63.1	63.4	63.3	
80										
C	18800	21600	24600	27800	31500	35400	39700	44400	49600	
P	4090	4170	4260	4370	4510	4650	4820	5000	5200	
A	17.4	17.5	17.6	17.8	18	18.3	18.6	18.9	19.3	
M	293	338	386	438	496	560	630	705	790	
E	4.6	5.2	5.8	6.4	7	7.6	8.2	8.9	9.5	
%	52.9	55.9	58.4	60.3	61.6	62.4	62.8	62.6	62	
70										
C	19800	22700	25900	29300	33200	37400	42000	47000	52500	
P	3780	3830	3910	4020	4140	4280	4450	4630	4830	
A	16.9	16.9	17	17.1	17.3	17.6	17.8	18.2	18.6	
M	292	336	384	436	494	560	630	705	790	
E	5.3	5.9	6.6	7.3	8	8.7	9.4	10.2	10.9	
%	53.2	56.2	58.5	60.1	61.2	61.6	61.4	60.7	59.5	

Nominal Performance Values (±5%) based on 72 hours run-in. Subject to change without notice.

C:Capacity(Btu/hr), P:Power(Watts), A:Current(Amps), M:Mass Flow(lbs/hr), E:EER(Btu/Watt-hr), %Isentropic Efficiency(%)

RATING CONDITIONS

65 °F Return Gas
0 °F Subcooling
95 °F Ambient Air Over

60 Hz Operation**MEDIUM****TEMPERATURE**

HFCs Require Use of Polyol Ester
Lubricant Approved by Bulletin
AE-1248

ZF24K4E-TWC**HFC-507****COPELAND SCROLL™****TWC 208/230-3-60**

Condensing Temperature °F
(Sat Dew Pt Pressure, psig)

Evaporating Temperature °F (Sat Dew Pt Pressure, psig)

		140	-10	(26)	-5	(30)	0	(35)	5	(41)	10	(46)	15	(52)	20	(59)	25	(66)	30	(73)	35	(81)	40	(90)	45	(99)
130 (364)	C							27900		30800		34000		37500		41300		45500		50000		55000		60500		66000
	P							8150		8450		8700		8950		9200		9450		9650		9900		10100		10300
	A							25.8		26.4		27.1		27.7		28.3		28.9		29.4		30		30.5		31
	M							745		830		925		1030		1150		1280		1420		1580		1750		1940
	E							3.4		3.7		3.9		4.2		4.5		4.8		5.2		5.6		6		6.4
	%							59		59.8		60.6		61.3		62.1		62.7		63.3		63.7		64		64
120 (320)	C	26100			29000			32100		35600		39300		43300		47700		52500		57500		63500		69500		76000
	P	7100			7350			7600		7850		8100		8350		8550		8800		9000		9250		9450		9650
	A	23.4			24			24.5		25.1		25.7		26.2		26.8		27.3		27.9		28.4		28.9		29.4
	M	610			680			755		845		940		1040		1160		1290		1430		1590		1760		1950
	E	3.7			3.9			4.2		4.5		4.9		5.2		5.6		6		6.4		6.9		7.4		7.9
	%	58.9			59.8			60.5		61.2		61.8		62.3		62.8		63.1		63.3		63.3		63.1		62.6
110 (279)	C	29300			32500			36100		40000		44200		48800		53500		59000		65000		71000		78000		85500
	P	6600			6850			7050		7300		7550		7750		8000		8200		8400		8650		8850		9050
	A	22.3			22.8			23.3		23.9		24.4		24.9		25.4		25.9		26.4		26.9		27.4		27.9
	M	615			690			765		855		950		1060		1170		1300		1450		1600		1780		1970
	E	4.4			4.8			5.1		5.5		5.9		6.3		6.7		7.2		7.7		8.2		8.8		9.4
	%	60.5			61.3			61.9		62.4		62.7		63		63.1		62.9		62.7		62.2		61.4		60.4
105 (261)	C	32200			35800			39800		44100		48800		54000		59500		65500		72000		79000		86500		94500
	P	6150			6350			6550		6750		7000		7200		7450		7650		7850		8100		8300		8500
	A	21.3			21.7			22.2		22.7		23.2		23.6		24.1		24.6		25.2		25.7		26.2		26.6
	M	625			695			775		865		965		1070		1190		1320		1460		1620		1790		1980
	E	5.2			5.6			6.1		6.5		7		7.5		8		8.5		9.1		9.7		10.4		11.1
	%	61.9			62.6			63.1		63.3		63.3		63.2		62.8		62.2		61.3		60.2		58.8		57.1
100 (243)	C	33500			37400			41600		46100		51000		56500		62000		68500		75000		82500		90500		98500
	P	5900			6100			6300		6500		6750		6950		7150		7400		7600		7850		8050		8300
	A	20.8			21.2			21.7		22.1		22.6		23.1		23.6		24.1		24.6		25.1		25.6		26.1
	M	625			700			780		870		970		1080		1190		1320		1470		1630		1800		1990
	E	5.7			6.1			6.6		7.1		7.6		8.1		8.7		9.2		9.9		10.5		11.2		11.9
	%	62.5			63.2			63.5		63.6		63.4		63		62.3		61.4		60.3		58.8		57		54.9
90 (210)	C	34900			38900			43300		48000		53000		59000		65000		71500		78500		86000		94000		103000
	P	5650			5850			6050		6250		6500		6700		6950		7150		7400		7600		7850		8100
	A	20.3			20.7			21.1		21.6		22		22.5		23		23.5		24		24.5		25		25.6
	M	630			705			785		875		975		1080		1200		1330		1480		1630		1810		1990
	E	6.1			6.6			7.1		7.7		8.2		8.8		9.4		10		10.6		11.3		12		12.7
	%	63			63.5			63.8		63.6		63.2		62.6		61.6		60.4		58.9		57.1		54.9		52.4
80 (180)	C	37400			41700			46500		51500		57500		63500		70000		77000		84500		93000		102000		111000
	P	5250			5400			5600		5800		6050		6250		6500		6700		6950		7200		7450		7700
	A	19.4			19.8			20.2		20.6		21		21.5		22		22.5		23		23.6		24.1		24.7
	M	630			710			790		885		980		1090		1210		1340		1490		1650		1820		2010
	E	7.1			7.7			8.3		8.9		9.5		10.1		10.8		11.5		12.2		12.9		13.6		14.4
	%	63.3			63.7			63.6		63		62.1		60.8		59.2		57.3		55		52.4		49.5		46.2
70 (154)	C	39700			44400			49600		55000		61000		68000		75000		82500		91000		99500		109000		
	P	4820			5000			5200		5400		5600		5850		6100		6350		6600		6850		7150		
	A	18.6			18.9			19.3		19.7		20.2		20.7		21.2		21.7		22.2		22.8		23.4		
	M	630			710			795		885		990		1100		1220		1350		1500		1660		1830		
	E	8.2			8.9			9.5		10.2		10.9		11.6		12.3		13		13.7		14.5		15.3		
	%	62.7			62.8			62.3		61.2		59.7		57.7		55.4		52.7		49.6		46.2		42.4		

Nominal Performance Values (±5%) based on 72 hours run-in. Subject to change without notice.

C:Capacity(Btu/hr), P:Power(Watts), A:Current(Amps), M:Mass Flow(lbs/hr), E:EER(Btu/Watt-hr), %Isentropic Efficiency(%)

ZF24K4E-TWC

HFC, R-134a, Mid Point, 60 Hz, 3 - Phase, 208/230 V

Medium Temp, Liquid Injected

Production Status: Available for sale to all U.S. customers. Please check with your local Emerson Climate Technologies Representative for international availability.



Service Parts

<u>Reference</u>	<u>Component</u>	<u>Quantity</u>	<u>Description</u>	<u>Comments</u>
	971-0547-01	1	MODULE-PHASE SENSING KIT	
1	918-0019-01	1	HEATER-CRANKCASE GROUP	120V70WWRAP AROUND
1	918-0019-04	1	HEATER-CRANKCASE GROUP	240V70WWRAP AROUND
2	527-0159-00	1	SOFT MOUNT KIT	
7	998-0510-39	1	SERV VALVE KIT 7/8 SWT	DISCHARGE
8	998-0510-46	1	SERV VALVE KIT 1 3/8 SWT	SUCTION
9	998-7015-00	1	HEATER JUNCTION BOX KIT	
11	070-0011-00	1	GLASS-SIGHT	

ZF24K4E-TWC

HFC, R-134a, Mid Point, 60 Hz, 3 - Phase, 208/230 V

Medium Temp, Liquid Injected

Production Status: Available for sale to all U.S. customers. Please check with your local Emerson Climate Technologies Representative for international availability.



Accessories

PartNumber	Description	
018-0036-00	Crankcase Heater, 240V, 70W, 26" Lead Length	
018-0036-01	Crankcase Heater, 120V, 70W, 26" Lead Length	
018-0036-02	Crankcase Heater, 480V, 70W, 26" Lead Length	
018-0036-03	Crankcase Heater, 575V, 60W, 26" Lead Length	
018-0036-04	Crankcase Heater, 240V, 70W, 34" Lead Length	
018-0036-05	Crankcase Heater, 480V, 70W, 34" Lead Length	
018-0036-06	Crankcase Heater, 575V, 60W, 34" Lead Length	
495-3803-00	Oil Control Reference Drawing	
505-0637-00	Sound Blanket for ZF24-ZF48K, ZS56K-ZS11M, ZB56K-ZB11M	
510-7002-22	Liquid Injection Kit (capillary tube not included), 240V	
510-7002-23	Liquid Injection Kit (capillary tube not included), 120V	
527-0158-00	Hard Mount Kit	
527-0159-00	Standard Mount	
971-0547-01	Motor Protection Module (With Phase Protection)	
998-0157-00	Oil Level Control	
998-0622-00	Sightglass Adapter (Straight to pipe thread)	
998-1873-00	Injection capillary tube for ZF18:R22, ZF24:R22, ZF33:R22	CAP TUBE SIZE 5" OF .05
998-1873-01	Injection capillary tube for ZF24:R134a, ZF33:R404A/R507	CAP TUBE SIZE 17.5" OF .05
998-1873-02	Injection capillary tube for ZF33:R134a	CAP TUBE SIZE
998-1873-03	Injection capillary tube for ZF24:R404A/R507	CAP TUBE SIZE 30" OF .05
998-1873-04	Injection capillary tube for ZF40:R404A/R507/R22, ZF48:R404A/R507	CAP TUBE SIZE 30" OF .07
998-1873-05	Injection Capillary tube for ZF48:R22	CAP TUBE SIZE 10" OF .07
998-5100-27	Suction & Discharge Valve Kit. includes rotalock suction and discharge service valves and seals. 1 3/8" Suction Valve, 7/8" Discharge Valve, 1 3/4" - 12 Suction Valve Seal, 1 1/4" - 12 Discharge Valve Seal	
998-5100-38	Rotalock Service Valve Kit (ZF48K, ZS11M, ZB11M Only)	
998-E022-01	Polyol Ester Oil. Approved for use with specific Copeland Hermetic & Semi Hermetic models. Consult specific model family nomenclatures for oil identifier in the model number.	

ZF24K4E-TWC



HFC, R-134a, Mid Point, 60 Hz, 3 - Phase, 208/230 V
Medium Temp, Liquid Injected

Production Status: Available for sale to all U.S. customers. Please check with your local Emerson Climate Technologies Representative for international availability.

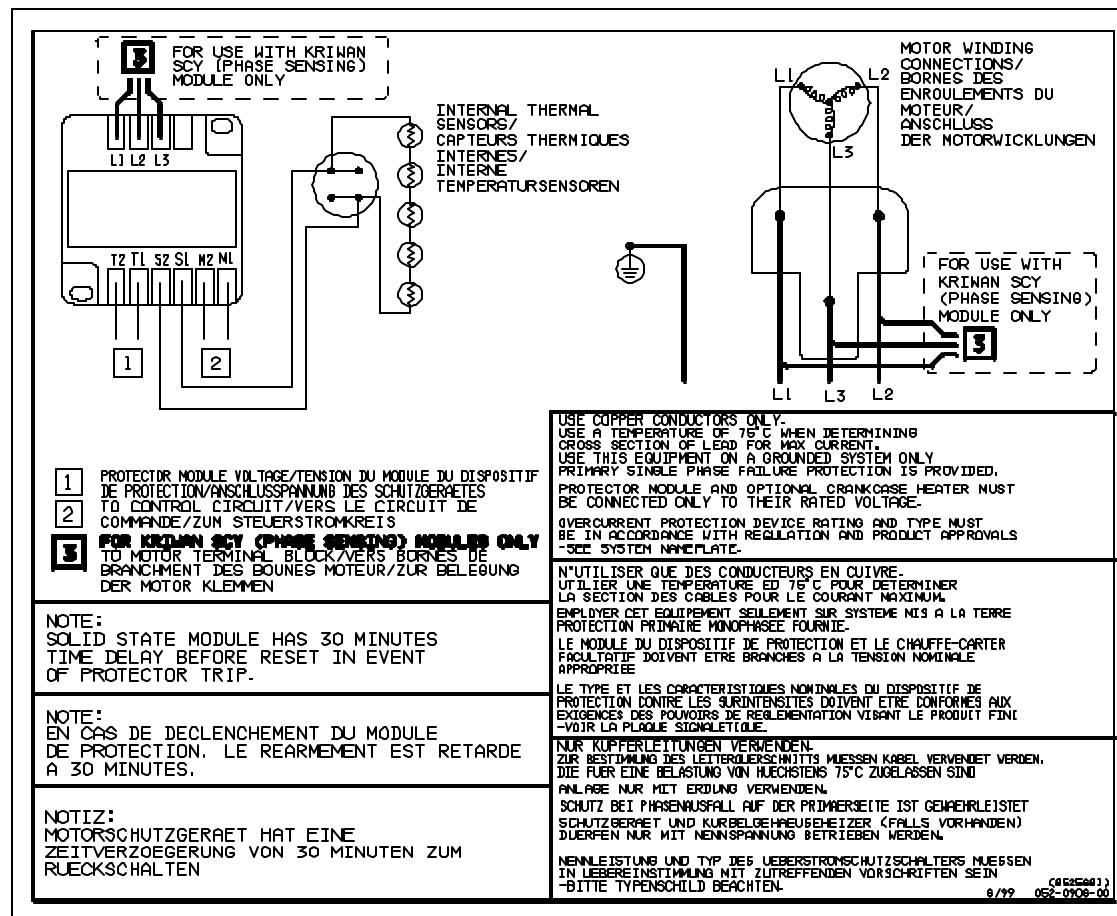
Electrical Components

Stator					
Resistance:	+-7%	Line to Line:	0.37	Line To Wye:	0.0

Stator					
Resistance:	+-7%	Line to Line:	0.348	Line To Wye:	0.0

Stator					
Resistance:	+-7%	Line to Line:	0.37	Line To Wye:	0.0

Modular Protector					
Part No.	071-0620-00				
Usage Description:	120/240V PHASE SENSING				
<u>Vendor Name</u>					
KRIWAN					

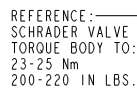
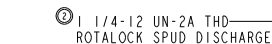


Copeland

Emerson Climate Technologies and the Emerson Climate Technologies logo are service marks and trademarks of Emerson Electric Co. Copeland is a registered trademark of Copeland Corporation. © 2003 Copeland Corporation.

EMERSON
Climate Technologies

SPECIFICATIONS	
ES NO.	DESCRIPTION
ES81-159	CLEANLINESS
ES81-250	IDENTIFICATION
ES92-155	CONVERSION-METRIC



ON FITTING
254-0.2581

A

163.17
[6.42]

2

LIQUID INJECTION
FOR ZF MODELS ONLY.

DUE TO ACCUMULATED ASSEMBLY TOLERANCES
THE LISTED COMPONENTS MAY VARY FROM
THE MOUNTING HOLES AS TABULATED

SUCTION FITTING	± 3.0 [0.12]
DISCHARGE FITTING	± 3.0 [0.12]
LIQUID INJECTION	± 3.0 [0.12]

CONFIDENTIALITY NOTICE
THIS DRAWING AND THE INFORMATION
CONTAINED HEREIN ARE THE EXCLUSIVE
PROPERTY OF COPELAND. IT SHALL BE
RETURNED TO COPELAND UPON DEMAND
AND SHALL NOT BE REPRODUCED IN
WHOLE OR IN PART, DISCLOSED TO
ANYONE ELSE OR USED WITHOUT THE
WRITTEN CONSENT OF COPELAND.

32-0205-011	2	CONNECTED TO CAP ASSM. INS-95-066-00 NIM-95-066Z-00	02-07-95	Y/N	CHK
32-0103-025	1	RECORDED AND REVISED	05-18-04	Y/N	CHK
32-0101-058	0	RELEASED	01-02-01	P/M	
CHARGE NO.	REV.	REVISIONS	DATE	BY	CHK'D
MATERIAL SPECIFICATION	DRAWN BY	CHECKED BY	APPROVED BY	SUPERSEDES NO. / REV. NO.	
	OTL	SBM	CHK	497-0345-00 / 0	
	DATE	DATE	DATE	SCALE	DO NOT SCALE THIS DRAWING
N/A	05-18-04	05-18-04	05-18-04	3:8	
TITLE				DRAWING NUMBER SHEET OF TOTAL	
REF DWG- WELDR CAP ASSM				497-0345-00 1 OF 1	