

# Heavygel 3HM

## **Air cooled chillers designed for rugged industrial service.**

13 Models driven by hermetic scroll compressors with capacities of 68 – 443 kW in ambient temperatures to 43°C *plus* 7 models to 233 kW in ambient temperatures to 55°C for global adaptability. A wide choice of hydraulic configurations, including units with no pumps, evaporator recirculation pumps only or completely self-contained packages with pumps and tanks to suit any situation. Oversized heat exchangers provide industry leading EERs and multiple axial fan choices can satisfy any application, from simple on/off to high pressure for use with ductwork. And low environmental impact R410a or R134a (high temperature units) to 1005/2009 standards are used exclusively.





## Model 3HM95

COOLING CAPACITIES (KW) <sup>1</sup>														
Ambient Air (°C)	Coolant Supply To Process (°C)													
	ST Version (Minimum Ambient: -15°C)							HT Version (Minimum Ambient: 5°C)						
	30% Ethylene Glycol Solution			Pure Water (No Glycol)										
	-5	0	5	7	10	15	18	7	10	15	17½	20	22½	25
25	43	51	60	70	77	89	97	<b>58</b>	65	77	83	84	84	84
30	41	48	57	66	72	84	91	<b>55</b>	61	73	79	80	80	80
35	38	45	53	62	<b>68</b>	79	86	<b>52</b>	<b>58</b>	69	75	76	76	76
40	36	42	50	58	64	74	81	<b>49</b>	<b>55</b>	65	71	72	72	72
43	35	41	48	55	61	71	77	<b>48</b>	<b>53</b>	63	69	70	70	70
45	---	---	---	---	---	---	---	<b>47</b>	<b>52</b>	62	67	68	68	68
50	---	---	---	---	---	---	---	<b>44</b>	<b>49</b>	58	63	64	64	64
55	---	---	---	---	---	---	---	<b>41</b>	<b>45</b>	54	59	60	60	60

PHYSICAL DATA <sup>6</sup>							
ST Version				HT Version			
Comp (no)	1	Fans (no x kW) <sup>C</sup>	2 x 1.94	Comp (no)	1	Fans (no x kW) <sup>C</sup>	2 x 1.94
Comp (hp)	25	Air Flow (m³/sec)	11.32	Comp (hp)	30	Air Flow (m³/sec)	11.32
Refrigeration Circuits	1	Connections (Victaulic) <sup>D</sup>	DN50 (2")	Refrigeration Circuits	1	Connections (Victaulic) <sup>D</sup>	DN50 (2")
Comp Power (kW) <sup>7</sup>	20.3	Length (mm) <sup>B</sup>	3505	Comp Power (kW) <sup>7</sup>	16.2	Length (mm) <sup>B</sup>	3505
		Width (mm)	1160			Width (mm)	1160
Shipping Weight (kg) <sup>A</sup>	930	Height (mm) <sup>B</sup>	2130	Shipping Weight (kg) <sup>A</sup>	940	Height (mm) <sup>B</sup>	2130
Operating Weight (kg) <sup>A</sup>	1250	Sound Level (dB(A) @ 10 m) <sup>C</sup>	55.3	Operating Weight (kg) <sup>A</sup>	1250	Sound Level (dB(A) @ 10 m) <sup>C</sup>	59.3

<sup>A</sup> Maximum weight with evaporator pump, process pump and reservoir. Consult factory for other configurations.  
<sup>B</sup> Height with AC/TC fans. Add 35 mm for EC fans, 53 mm for EH fans. Consult factory for fan selections and applications.  
 Add 300 mm to length for piping connections and control HMI.  
<sup>C</sup> Data with AC/TC fans. Consult factory for other fan types.  
<sup>D</sup> Victaulic flange adapters are provided.

HYDRAULIC DATA					
ST Version			HT Version		
Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	12	Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	10
	ΔP (bar)	0.5		ΔP (bar)	0.3
Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	12	Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	10
	ΔP (bar)	0.6		ΔP (bar)	0.4
Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	1.1	Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	1.1
Optional Process Pump	Max Flow (mc/h@bar)	22@2.5	Optional Process Pump	Max Flow (mc/h@bar)	22@2.5
	Min Flow (mc/h@bar)	6@3.6		Min Flow (mc/h@bar)	6@3.6
	Input (kW) <sup>3,4</sup>	2.2		Input (kW) <sup>3,4</sup>	2.2
Optional Tank Volume (l)	420	Optional Tank Volume (l)	420		

  

ELECTRICAL DATA (400/3/50)			
Installed Power (kW) AC/TC Fans <sup>5</sup>	31.5	Installed Power (kW) AC/TC Fans <sup>5</sup>	29.5
Installed Power (kW) EC Fans <sup>5</sup>	31.4	Installed Power (kW) EC Fans <sup>5</sup>	29.4
Installed Power (kW) EH Fans <sup>5</sup>	34.4	Installed Power (kW) EH Fans <sup>5</sup>	32.2

<sup>1</sup> Nominal capacities are indicated in bold italics (10°C water to process, 35°C ambient air).  
<sup>2</sup> At nominal capacity and 5°C ΔT. Shell & tube evaporators are not available with evaporator pump, process pump and tank configurations.  
<sup>3</sup> Deduct 0.7 kW from listed capacities per pump kW.  
<sup>4</sup> Add to installed power factors.  
<sup>5</sup> Data for electrical protection devices only. Add optional pump power inputs. The installing contractor is responsible for conformance to all safety codes. Consult factory for fan selections.  
<sup>6</sup> Do **NOT** use the data in this document for construction purposes. Specifications are subject to change without notice.  
<sup>7</sup> At nominal operating conditions including compressors only.



## Model 3HM110

COOLING CAPACITIES (KW) <sup>1</sup>														
Ambient Air (°C)	Coolant Supply To Process (°C)													
	ST Version (Minimum Ambient: -15°C)							HT Version (Minimum Ambient: 5°C)						
	30% Ethylene Glycol Solution			Pure Water (No Glycol)										
	-5	0	5	7	10	15	18	7	10	15	17½	20	22½	25
25	54	65	76	88	97	113	123	76	85	101	110	111	111	111
30	51	61	72	83	91	106	116	72	81	96	104	106	106	106
35	49	57	67	78	<b>86</b>	100	109	68	<b>76</b>	91	99	101	101	101
40	46	54	63	73	80	93	102	64	72	86	94	95	95	95
43	44	51	60	70	77	89	98	62	69	83	90	92	92	92
45	---	---	---	---	---	---	---	61	68	81	88	90	90	90
50	---	---	---	---	---	---	---	57	63	76	83	84	84	84
55	---	---	---	---	---	---	---	53	59	71	78	79	79	79

PHYSICAL DATA <sup>6</sup>							
ST Version				HT Version			
Comp (no)	2	Fans (no x kW) <sup>C</sup>	2 x 1.94	Comp (no)	2	Fans (no x kW) <sup>C</sup>	2 x 1.94
Comp (hp)	15	Air Flow (m³/sec)	11.32	Comp (hp)	20	Air Flow (m³/sec)	11.32
Refrigeration Circuits	1	Connections (Victaulic) <sup>D</sup>	DN50 (2")	Refrigeration Circuits	1	Connections (Victaulic) <sup>D</sup>	DN50 (2")
Comp Power (kW) <sup>7</sup>	23.9	Length (mm) <sup>B</sup>	3505	Comp Power (kW) <sup>7</sup>	21.2	Length (mm) <sup>B</sup>	3505
		Width (mm)	1160			Width (mm)	1160
Shipping Weight (kg) <sup>A</sup>	960	Height (mm) <sup>B</sup>	2130	Shipping Weight (kg) <sup>A</sup>	1050	Height (mm) <sup>B</sup>	2130
Operating Weight (kg) <sup>A</sup>	1270	Sound Level (dB(A) @ 10 m) <sup>C</sup>	54.6	Operating Weight (kg) <sup>A</sup>	1370	Sound Level (dB(A) @ 10 m) <sup>C</sup>	58.5

<sup>A</sup> Maximum weight with evaporator pump, process pump and reservoir. Consult factory for other configurations.  
<sup>B</sup> Height with AC/TC fans. Add 35 mm for EC fans, 53 mm for EH fans. Consult factory for fan selections and applications. Add 300 mm to length for piping connections and control HMI.  
<sup>C</sup> Data with AC/TC fans. Consult factory for other fan types.  
<sup>D</sup> Victaulic flange adapters are provided.

HYDRAULIC DATA					
ST Version			HT Version		
Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	15	Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	13
	ΔP (bar)	0.5		ΔP (bar)	0.4
Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	15	Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	13
	ΔP (bar)	0.5		ΔP (bar)	0.3
Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	1.1	Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	1.1
Optional Process Pump	Max Flow (mc/h@bar)	22@2.5	Optional Process Pump	Max Flow (mc/h@bar)	22@2.5
	Min Flow (mc/h@bar)	6@3.6		Min Flow (mc/h@bar)	6@3.6
	Input (kW) <sup>3,4</sup>	2.2		Input (kW) <sup>3,4</sup>	2.2
Optional Tank Volume (l)	420	Optional Tank Volume (l)	420		

  

ELECTRICAL DATA (400/3/50)			
Installed Power (kW) AC/TC Fans <sup>5</sup>	37.8	Installed Power (kW) AC/TC Fans <sup>5</sup>	38.3
Installed Power (kW) EC Fans <sup>5</sup>	37.7	Installed Power (kW) EC Fans <sup>5</sup>	38.2
Installed Power (kW) EH Fans <sup>5</sup>	40.7	Installed Power (kW) EH Fans <sup>5</sup>	41.2

<sup>1</sup> Nominal capacities are indicated in bold italics (10°C water to process, 35°C ambient air).  
<sup>2</sup> At nominal capacity and 5°C ΔT. Shell & tube evaporators are not available with evaporator pump, process pump and tank configurations.  
<sup>3</sup> Deduct 0.7 kW from listed capacities per pump kW.  
<sup>4</sup> Add to installed power factors.  
<sup>5</sup> Data for electrical protection devices only. Add optional pump power inputs. The installing contractor is responsible for conformance to all safety codes. Consult factory for fan selections.  
<sup>6</sup> Do **NOT** use the data in this document for construction purposes. Specifications are subject to change without notice.  
<sup>7</sup> At nominal operating conditions including compressors only.



## Model 3HM120

COOLING CAPACITIES (KW) <sup>1</sup>														
Ambient Air (°C)	Coolant Supply To Process (°C)													
	ST Version (Minimum Ambient: -15°C)							HT Version (Minimum Ambient: 5°C)						
	30% Ethylene Glycol Solution			Pure Water (No Glycol)										
	-5	0	5	7	10	15	18	7	10	15	17½	20	22½	25
25	55	66	78	90	98	114	124	---	---	---	---	---	---	---
30	52	62	73	84	93	107	117	---	---	---	---	---	---	---
35	49	58	68	79	<b>87</b>	101	110	---	---	---	---	---	---	---
40	46	54	64	74	81	94	103	---	---	---	---	---	---	---
43	44	52	61	71	78	90	98	---	---	---	---	---	---	---
45	---	---	---	---	---	---	---	---	---	---	---	---	---	---
50	---	---	---	---	---	---	---	---	---	---	---	---	---	---
55	---	---	---	---	---	---	---	---	---	---	---	---	---	---

PHYSICAL DATA <sup>6</sup>							
ST Version				HT Version			
Comp (no)	1	Fans (no x kW) <sup>C</sup>	2 x 1.94	Comp (no)	---	Fans (no x kW) <sup>C</sup>	---
Comp (hp)	30	Air Flow (m³/sec)	11.32	Comp (hp)	---	Air Flow (m³/sec)	---
Refrigeration Circuits	1	Connections (Victaulic) <sup>D</sup>	DN50 (2")	Refrigeration Circuits	---	Connections (Victaulic) <sup>D</sup>	---
Comp Power (kW) <sup>7</sup>	26.6	Length (mm) <sup>B</sup>	3505	Comp Power (kW) <sup>7</sup>	---	Length (mm) <sup>B</sup>	---
		Width (mm)	1160			Width (mm)	---
Shipping Weight (kg) <sup>A</sup>	940	Height (mm) <sup>B</sup>	2130	Shipping Weight (kg) <sup>A</sup>	---	Height (mm) <sup>B</sup>	---
Operating Weight (kg) <sup>A</sup>	1260	Sound Level (dB(A) @ 10 m) <sup>C</sup>	56.6	Operating Weight (kg) <sup>A</sup>	---	Sound Level (dB(A) @ 10 m) <sup>C</sup>	---

<sup>A</sup> Maximum weight with evaporator pump, process pump and reservoir. Consult factory for other configurations.  
<sup>B</sup> Height with AC/TC fans. Add 35 mm for EC fans, 53 mm for EH fans. Consult factory for fan selections and applications. Add 300 mm to length for piping connections and control HMI.  
<sup>C</sup> Data with AC/TC fans. Consult factory for other fan types.  
<sup>D</sup> Victaulic flange adapters are provided.

HYDRAULIC DATA					
ST Version			HT Version		
Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	15	Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	---
	ΔP (bar)	0.5		ΔP (bar)	---
Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	15	Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	---
	ΔP (bar)	0.5		ΔP (bar)	---
Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	1.1	Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	---
Optional Process Pump	Max Flow (mc/h@bar)	22@2.5	Optional Process Pump	Max Flow (mc/h@bar)	---
	Min Flow (mc/h@bar)	6@3.6		Min Flow (mc/h@bar)	---
	Input (kW) <sup>3,4</sup>	2.2		Input (kW) <sup>3,4</sup>	---
Optional Tank Volume (l)	420	Optional Tank Volume (l)	---	---	---

ELECTRICAL DATA (400/3/50)			
Installed Power (kW) AC/TC Fans <sup>5</sup>	40.0	Installed Power (kW) AC/TC Fans <sup>5</sup>	---
Installed Power (kW) EC Fans <sup>5</sup>	39.9	Installed Power (kW) EC Fans <sup>5</sup>	---
Installed Power (kW) EH Fans <sup>5</sup>	42.9	Installed Power (kW) EH Fans <sup>5</sup>	---

<sup>1</sup> Nominal capacities are indicated in bold italics (10°C water to process, 35°C ambient air).  
<sup>2</sup> At nominal capacity and 5°C ΔT. Shell & tube evaporators are not available with evaporator pump, process pump and tank configurations.  
<sup>3</sup> Deduct 0.7 kW from listed capacities per pump kW.  
<sup>4</sup> Add to installed power factors.  
<sup>5</sup> Data for electrical protection devices only. Add optional pump power inputs. The installing contractor is responsible for conformance to all safety codes. Consult factory for fan selections.  
<sup>6</sup> Do **NOT** use the data in this document for construction purposes. Specifications are subject to change without notice.  
<sup>7</sup> At nominal operating conditions including compressors only.



## Model 3HM140

COOLING CAPACITIES (KW) <sup>1</sup>														
Ambient Air (°C)	Coolant Supply To Process (°C)													
	ST Version (Minimum Ambient: -15°C)							HT Version (Minimum Ambient: 5°C)						
	30% Ethylene Glycol Solution			Pure Water (No Glycol)										
	-5	0	5	7	10	15	18	7	10	15	17½	20	22½	25
25	72	84	99	114	125	144	156	---	---	---	---	---	---	---
30	68	80	93	108	118	136	148	---	---	---	---	---	---	---
35	64	75	88	101	<b>111</b>	128	139	---	---	---	---	---	---	---
40	60	70	82	95	104	120	131	---	---	---	---	---	---	---
43	57	67	79	91	99	115	125	---	---	---	---	---	---	---
45	---	---	---	---	---	---	---	---	---	---	---	---	---	---
50	---	---	---	---	---	---	---	---	---	---	---	---	---	---
55	---	---	---	---	---	---	---	---	---	---	---	---	---	---

PHYSICAL DATA <sup>6</sup>							
ST Version				HT Version			
Comp (no)	1	Fans (no x kW) <sup>C</sup>	2 x 1.94	Comp (no)	---	Fans (no x kW) <sup>C</sup>	---
Comp (hp)	40	Air Flow (m³/sec)	11.32	Comp (hp)	---	Air Flow (m³/sec)	---
Refrigeration Circuits	1	Connections (Victaulic) <sup>D</sup>	DN50 (2")	Refrigeration Circuits	---	Connections (Victaulic) <sup>D</sup>	---
Comp Power (kW) <sup>7</sup>	33.6	Length (mm) <sup>B</sup>	3505	Comp Power (kW) <sup>7</sup>	---	Length (mm) <sup>B</sup>	---
		Width (mm)	1160			Width (mm)	---
Shipping Weight (kg) <sup>A</sup>	980	Height (mm) <sup>B</sup>	2130	Shipping Weight (kg) <sup>A</sup>	---	Height (mm) <sup>B</sup>	---
Operating Weight (kg) <sup>A</sup>	1290	Sound Level (dB(A) @ 10 m) <sup>C</sup>	57.6	Operating Weight (kg) <sup>A</sup>	---	Sound Level (dB(A) @ 10 m) <sup>C</sup>	---

<sup>A</sup> Maximum weight with evaporator pump, process pump and reservoir. Consult factory for other configurations.  
<sup>B</sup> Height with AC/TC fans. Add 35 mm for EC fans, 53 mm for EH fans. Consult factory for fan selections and applications. Add 300 mm to length for piping connections and control HMI.  
<sup>C</sup> Data with AC/TC fans. Consult factory for other fan types.  
<sup>D</sup> Victaulic flange adapters are provided.

HYDRAULIC DATA					
ST Version			HT Version		
Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	19	Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	---
	ΔP (bar)	0.5		ΔP (bar)	---
Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	19	Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	---
	ΔP (bar)	0.4		ΔP (bar)	---
Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	1.5	Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	---
Optional Process Pump	Max Flow (mc/h@bar)	42@2.6	Optional Process Pump	Max Flow (mc/h@bar)	---
	Min Flow (mc/h@bar)	12@3.8		Min Flow (mc/h@bar)	---
	Input (kW) <sup>3,4</sup>	4		Input (kW) <sup>3,4</sup>	---
Optional Tank Volume (l)	420	Optional Tank Volume (l)	---	---	---

  

ELECTRICAL DATA (400/3/50)			
Installed Power (kW) AC/TC Fans <sup>5</sup>	48.9	Installed Power (kW) AC/TC Fans <sup>5</sup>	---
Installed Power (kW) EC Fans <sup>5</sup>	48.8	Installed Power (kW) EC Fans <sup>5</sup>	---
Installed Power (kW) EH Fans <sup>5</sup>	51.8	Installed Power (kW) EH Fans <sup>5</sup>	---

<sup>1</sup> Nominal capacities are indicated in bold italics (10°C water to process, 35°C ambient air).  
<sup>2</sup> At nominal capacity and 5°C ΔT. Shell & tube evaporators are not available with evaporator pump, process pump and tank configurations.  
<sup>3</sup> Deduct 0.7 kW from listed capacities per pump kW.  
<sup>4</sup> Add to installed power factors.  
<sup>5</sup> Data for electrical protection devices only. Add optional pump power inputs. The installing contractor is responsible for conformance to all safety codes. Consult factory for fan selections.  
<sup>6</sup> Do **NOT** use the data in this document for construction purposes. Specifications are subject to change without notice.  
<sup>7</sup> At nominal operating conditions including compressors only.



## Model 3HM150

COOLING CAPACITIES (KW) <sup>1</sup>														
Ambient Air (°C)	Coolant Supply To Process (°C)													
	ST Version (Minimum Ambient: -15°C)							HT Version (Minimum Ambient: 5°C)						
	30% Ethylene Glycol Solution				Pure Water (No Glycol)									
	-5	0	5	7	10	15	18	7	10	15	17½	20	22½	25
25	68	82	97	112	123	143	155	93	104	123	134	136	136	136
30	64	77	91	105	116	135	146	88	99	117	127	129	129	129
35	60	72	85	99	<b>109</b>	126	138	84	<b>93</b>	111	121	123	123	123
40	56	67	80	92	102	118	129	79	88	105	114	116	116	116
43	54	64	76	88	97	113	124	76	85	101	110	112	112	112
45	---	---	---	---	---	---	---	74	83	99	108	109	109	109
50	---	---	---	---	---	---	---	69	77	93	101	103	103	103
55	---	---	---	---	---	---	---	64	72	87	95	96	96	96

PHYSICAL DATA <sup>6</sup>							
ST Version				HT Version			
Comp (no)	2	Fans (no x kW) <sup>C</sup>	2 x 1.94	Comp (no)	2	Fans (no x kW) <sup>C</sup>	2 x 1.94
Comp (hp)	20	Air Flow (m³/sec)	11.32	Comp (hp)	25	Air Flow (m³/sec)	11.32
Refrigeration Circuits	1	Connections (Victaulic) <sup>D</sup>	DN50 (2")	Refrigeration Circuits	1	Connections (Victaulic) <sup>D</sup>	DN50 (2")
Comp Power (kW) <sup>7</sup>	32.6	Length (mm) <sup>B</sup>	3505	Comp Power (kW) <sup>7</sup>	27.0	Length (mm) <sup>B</sup>	3505
		Width (mm)	1160			Width (mm)	1160
Shipping Weight (kg) <sup>A</sup>	1020	Height (mm) <sup>B</sup>	2130	Shipping Weight (kg) <sup>A</sup>	1120	Height (mm) <sup>B</sup>	2130
Operating Weight (kg) <sup>A</sup>	1340	Sound Level (dB(A) @ 10 m) <sup>C</sup>	55.2	Operating Weight (kg) <sup>A</sup>	1430	Sound Level (dB(A) @ 10 m) <sup>C</sup>	65.2

<sup>A</sup> Maximum weight with evaporator pump, process pump and reservoir. Consult factory for other configurations.  
<sup>B</sup> Height with AC/TC fans. Add 35 mm for EC fans, 53 mm for EH fans. Consult factory for fan selections and applications.  
 Add 300 mm to length for piping connections and control HMI.  
<sup>C</sup> Data with AC/TC fans. Consult factory for other fan types.  
<sup>D</sup> Victaulic flange adapters are provided.

HYDRAULIC DATA					
ST Version			HT Version		
Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	19	Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	16
	ΔP (bar)	0.5		ΔP (bar)	0.4
Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	19	Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	16
	ΔP (bar)	0.4		ΔP (bar)	0.3
Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	1.5	Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	1.5
Optional Process Pump	Max Flow (mc/h@bar)	42@2.6	Optional Process Pump	Max Flow (mc/h@bar)	42@2.6
	Min Flow (mc/h@bar)	12@3.8		Min Flow (mc/h@bar)	12@3.8
	Input (kW) <sup>3,4</sup>	4		Input (kW) <sup>3,4</sup>	4
Optional Tank Volume (l)	420	Optional Tank Volume (l)	420		
ELECTRICAL DATA (400/3/50)					
Installed Power (kW) AC/TC Fans <sup>5</sup>	49.1	Installed Power (kW) AC/TC Fans <sup>5</sup>	46.3		
Installed Power (kW) EC Fans <sup>5</sup>	49.0	Installed Power (kW) EC Fans <sup>5</sup>	46.2		
Installed Power (kW) EH Fans <sup>5</sup>	52.0	Installed Power (kW) EH Fans <sup>5</sup>	49.2		

<sup>1</sup> Nominal capacities are indicated in bold italics (10°C water to process, 35°C ambient air).  
<sup>2</sup> At nominal capacity and 5°C ΔT. Shell & tube evaporators are not available with evaporator pump, process pump and tank configurations.  
<sup>3</sup> Deduct 0.7 kW from listed capacities per pump kW.  
<sup>4</sup> Add to installed power factors.  
<sup>5</sup> Data for electrical protection devices only. Add optional pump power inputs. The installing contractor is responsible for conformance to all safety codes. Consult factory for fan selections.  
<sup>6</sup> Do **NOT** use the data in this document for construction purposes. Specifications are subject to change without notice.  
<sup>7</sup> At nominal operating conditions including compressors only.



## Model 3HM180

COOLING CAPACITIES (kW) <sup>1</sup>														
Ambient Air (°C)	Coolant Supply To Process (°C)													
	ST Version (Minimum Ambient: -15°C)							HT Version (Minimum Ambient: 5°C)						
	30% Ethylene Glycol Solution			Pure Water (No Glycol)										
	-5	0	5	7	10	15	18	7	10	15	17½	20	22½	25
25	86	103	121	140	153	178	193	<b>116</b>	<b>129</b>	<b>153</b>	<b>166</b>	<b>168</b>	<b>168</b>	<b>168</b>
30	82	97	114	132	145	168	182	<b>110</b>	<b>123</b>	<b>146</b>	<b>158</b>	<b>160</b>	<b>160</b>	<b>160</b>
35	77	91	107	124	<b>136</b>	158	172	<b>105</b>	<b>116</b>	<b>138</b>	<b>150</b>	<b>152</b>	<b>152</b>	<b>152</b>
40	72	85	100	116	127	148	161	<b>99</b>	<b>110</b>	<b>131</b>	<b>142</b>	<b>144</b>	<b>144</b>	<b>144</b>
43	69	81	96	111	122	142	155	<b>95</b>	<b>106</b>	<b>126</b>	<b>137</b>	<b>139</b>	<b>139</b>	<b>139</b>
45	---	---	---	---	---	---	---	<b>93</b>	<b>104</b>	<b>123</b>	<b>134</b>	<b>136</b>	<b>136</b>	<b>136</b>
50	---	---	---	---	---	---	---	<b>87</b>	<b>97</b>	<b>116</b>	<b>126</b>	<b>128</b>	<b>128</b>	<b>128</b>
55	---	---	---	---	---	---	---	<b>81</b>	<b>91</b>	<b>108</b>	<b>118</b>	<b>120</b>	<b>120</b>	<b>120</b>

PHYSICAL DATA <sup>6</sup>							
ST Version				HT Version			
Comp (no)	2	Fans (no x kW) <sup>C</sup>	3 x 1.94	Comp (no)	2	Fans (no x kW) <sup>C</sup>	3 x 1.94
Comp (hp)	25	Air Flow (m³/sec)	16.98	Comp (hp)	30	Air Flow (m³/sec)	16.98
Refrigeration Circuits	1	Connections (Victaulic) <sup>D</sup>	DN80 (3")	Refrigeration Circuits	1	Connections (Victaulic) <sup>D</sup>	DN80 (3")
Comp Power (kW) <sup>7</sup>	40.7	Length (mm) <sup>B</sup>	4540	Comp Power (kW) <sup>7</sup>	32.4	Length (mm) <sup>B</sup>	4540
		Width (mm)	1160			Width (mm)	1160
Shipping Weight (kg) <sup>A</sup>	1270	Height (mm) <sup>B</sup>	2130	Shipping Weight (kg) <sup>A</sup>	1310	Height (mm) <sup>B</sup>	2130
Operating Weight (kg) <sup>A</sup>	1790	Sound Level (dB(A) @ 10 m) <sup>C</sup>	57.3	Operating Weight (kg) <sup>A</sup>	1830	Sound Level (dB(A) @ 10 m) <sup>C</sup>	62.1

<sup>A</sup> Maximum weight with evaporator pump, process pump and reservoir. Consult factory for other configurations.  
<sup>B</sup> Height with AC/TC fans. Add 35 mm for EC fans, 53 mm for EH fans. Consult factory for fan selections and applications. Add 300 mm to length for piping connections and control HMI.  
<sup>C</sup> Data with AC/TC fans. Consult factory for other fan types.  
<sup>D</sup> Victaulic flange adapters are provided.

HYDRAULIC DATA					
ST Version			HT Version		
Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	23	Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	20
	ΔP (bar)	0.5		ΔP (bar)	0.4
Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	23	Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	20
	ΔP (bar)	0.4		ΔP (bar)	0.3
Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	1.5	Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	1.5
Optional Process Pump	Max Flow (mc/h@bar)	42@2.6	Optional Process Pump	Max Flow (mc/h@bar)	42@2.6
	Min Flow (mc/h@bar)	12@3.8		Min Flow (mc/h@bar)	12@3.8
	Input (kW) <sup>3,4</sup>	4		Input (kW) <sup>3,4</sup>	4
Optional Tank Volume (l)	670	Optional Tank Volume (l)	670	Optional Tank Volume (l)	670

ELECTRICAL DATA (400/3/50)			
Installed Power (kW) AC/TC Fans <sup>5</sup>	61.0	Installed Power (kW) AC/TC Fans <sup>5</sup>	57.0
Installed Power (kW) EC Fans <sup>5</sup>	60.9	Installed Power (kW) EC Fans <sup>5</sup>	56.9
Installed Power (kW) EH Fans <sup>5</sup>	65.4	Installed Power (kW) EH Fans <sup>5</sup>	61.4

<sup>1</sup> Nominal capacities are indicated in bold italics (10°C water to process, 35°C ambient air).  
<sup>2</sup> At nominal capacity and 5°C ΔT. Shell & tube evaporators are not available with evaporator pump, process pump and tank configurations.  
<sup>3</sup> Deduct 0.7 kW from listed capacities per pump kW.  
<sup>4</sup> Add to installed power factors.  
<sup>5</sup> Data for electrical protection devices only. Add optional pump power inputs. The installing contractor is responsible for conformance to all safety codes. Consult factory for fan selections.  
<sup>6</sup> Do **NOT** use the data in this document for construction purposes. Specifications are subject to change without notice.  
<sup>7</sup> At nominal operating conditions including compressors only.



## Model 3HM220

COOLING CAPACITIES (KW) <sup>1</sup>														
Ambient Air (°C)	Coolant Supply To Process (°C)													
	ST Version (Minimum Ambient: -15°C)							HT Version (Minimum Ambient: 5°C)						
	30% Ethylene Glycol Solution			Pure Water (No Glycol)										
	-5	0	5	7	10	15	18	7	10	15	17½	20	22½	25
25	109	129	152	176	194	225	245	<b>152</b>	170	202	219	223	223	223
30	103	122	143	166	182	212	231	144	161	192	208	212	212	212
35	97	114	135	156	<b>171</b>	199	217	136	<b>152</b>	182	198	201	201	201
40	91	107	126	146	160	186	203	129	144	172	187	190	190	190
43	88	103	120	139	153	178	195	124	139	166	181	184	184	184
45	---	---	---	---	---	---	---	121	135	162	177	180	180	180
50	---	---	---	---	---	---	---	113	127	152	166	169	169	169
55	---	---	---	---	---	---	---	106	118	142	155	158	158	158

PHYSICAL DATA <sup>6</sup>							
ST Version				HT Version			
Comp (no)	4	Fans (no x kW) <sup>C</sup>	4 x 1.94	Comp (no)	4	Fans (no x kW) <sup>C</sup>	4 x 1.94
Comp (hp)	15	Air Flow (m <sup>3</sup> /sec)	22.64	Comp (hp)	20	Air Flow (m <sup>3</sup> /sec)	22.64
Refrigeration Circuits	2	Connections (Victaulic) <sup>D</sup>	DN80 (3")	Refrigeration Circuits	2	Connections (Victaulic) <sup>D</sup>	DN80 (3")
Comp Power (kW) <sup>7</sup>	47.9	Length (mm) <sup>B</sup>	3505	Comp Power (kW) <sup>7</sup>	42.4	Length (mm) <sup>B</sup>	3505
		Width (mm)	2260			Width (mm)	2260
Shipping Weight (kg) <sup>A</sup>	1700	Height (mm) <sup>B</sup>	2130	Shipping Weight (kg) <sup>A</sup>	1880	Height (mm) <sup>B</sup>	2130
Operating Weight (kg) <sup>A</sup>	2530	Sound Level (dB(A) @ 10 m) <sup>C</sup>	57.4	Operating Weight (kg) <sup>A</sup>	2710	Sound Level (dB(A) @ 10 m) <sup>C</sup>	61.3

<sup>A</sup> Maximum weight with evaporator pump, process pump and reservoir. Consult factory for other configurations.  
<sup>B</sup> Height with AC/TC fans. Add 35 mm for EC fans, 53 mm for EH fans. Consult factory for fan selections and applications. Add 300 mm to length for piping connections and control HMI.  
<sup>C</sup> Data with AC/TC fans. Consult factory for other fan types.  
<sup>D</sup> Victaulic flange adapters are provided.

HYDRAULIC DATA					
ST Version			HT Version		
Brazed Plate Evaporator <sup>2</sup>	Flow (mc/h)	29	Brazed Plate Evaporator <sup>2</sup>	Flow (mc/h)	26
	ΔP (bar)	0.4		ΔP (bar)	0.3
Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	29	Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	26
	ΔP (bar)	0.5		ΔP (bar)	0.4
Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	1.5	Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	1.5
Optional Process Pump	Max Flow (mc/h@bar)	42@2.6	Optional Process Pump	Max Flow (mc/h@bar)	42@2.6
	Min Flow (mc/h@bar)	12@3.8		Min Flow (mc/h@bar)	12@3.8
	Input (kW) <sup>3,4</sup>	4		Input (kW) <sup>3,4</sup>	4
Optional Tank Volume (l)		420	Optional Tank Volume (l)		420

  

ELECTRICAL DATA (400/3/50)			
Installed Power (kW) AC/TC Fans <sup>5</sup>	75.6	Installed Power (kW) AC/TC Fans <sup>5</sup>	76.6
Installed Power (kW) EC Fans <sup>5</sup>	75.4	Installed Power (kW) EC Fans <sup>5</sup>	76.4
Installed Power (kW) EH Fans <sup>5</sup>	81.4	Installed Power (kW) EH Fans <sup>5</sup>	82.4

<sup>1</sup> Nominal capacities are indicated in bold italics (10°C water to process, 35°C ambient air).  
<sup>2</sup> At nominal capacity and 5°C ΔT. Shell & tube evaporators are not available with evaporator pump, process pump and tank configurations.  
<sup>3</sup> Deduct 0.7 kW from listed capacities per pump kW.  
<sup>4</sup> Add to installed power factors.  
<sup>5</sup> Data for electrical protection devices only. Add optional pump power inputs. The installing contractor is responsible for conformance to all safety codes. Consult factory for fan selections.  
<sup>6</sup> Do **NOT** use the data in this document for construction purposes. Specifications are subject to change without notice.  
<sup>7</sup> At nominal operating conditions including compressors only.





## Model 3HM230

COOLING CAPACITIES (KW) <sup>1</sup>														
Ambient Air (°C)	Coolant Supply To Process (°C)													
	ST Version (Minimum Ambient: -15°C)							HT Version (Minimum Ambient: 5°C)						
	30% Ethylene Glycol Solution			Pure Water (No Glycol)										
	-5	0	5	7	10	15	18	7	10	15	17½	20	22½	25
25	110	132	155	179	197	227	247	---	---	---	---	---	---	---
30	104	124	146	169	185	214	233	---	---	---	---	---	---	---
35	98	116	137	158	<b>174</b>	201	219	---	---	---	---	---	---	---
40	92	109	128	148	162	188	205	---	---	---	---	---	---	---
43	88	104	122	142	155	180	197	---	---	---	---	---	---	---
45	---	---	---	---	---	---	---	---	---	---	---	---	---	---
50	---	---	---	---	---	---	---	---	---	---	---	---	---	---
55	---	---	---	---	---	---	---	---	---	---	---	---	---	---

PHYSICAL DATA <sup>6</sup>							
ST Version				HT Version			
Comp (no)	2	Fans (no x kW) <sup>C</sup>	3 x 1.94	Comp (no)	---	Fans (no x kW) <sup>C</sup>	---
Comp (hp)	30	Air Flow (m <sup>3</sup> /sec)	16.98	Comp (hp)	---	Air Flow (m <sup>3</sup> /sec)	---
Refrigeration Circuits	1	Connections (Victaulic) <sup>D</sup>	DN80 (3")	Refrigeration Circuits	---	Connections (Victaulic) <sup>D</sup>	---
Comp Power (kW) <sup>7</sup>	53.2	Length (mm) <sup>B</sup>	4540	Comp Power (kW) <sup>7</sup>	---	Length (mm) <sup>B</sup>	---
		Width (mm)	1160			Width (mm)	---
Shipping Weight (kg) <sup>A</sup>	1300	Height (mm) <sup>B</sup>	2130	Shipping Weight (kg) <sup>A</sup>	---	Height (mm) <sup>B</sup>	---
Operating Weight (kg) <sup>A</sup>	1820	Sound Level (dB(A) @ 10 m) <sup>C</sup>	58.9	Operating Weight (kg) <sup>A</sup>	---	Sound Level (dB(A) @ 10 m) <sup>C</sup>	---

<sup>A</sup> Maximum weight with evaporator pump, process pump and reservoir. Consult factory for other configurations.  
<sup>B</sup> Height with AC/TC fans. Add 35 mm for EC fans, 53 mm for EH fans. Consult factory for fan selections and applications. Add 300 mm to length for piping connections and control HMI.  
<sup>C</sup> Data with AC/TC fans. Consult factory for other fan types.  
<sup>D</sup> Victaulic flange adapters are provided.

HYDRAULIC DATA					
ST Version			HT Version		
Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	30	Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	---
	ΔP (bar)	0.5		ΔP (bar)	---
Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	30	Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	---
	ΔP (bar)	0.6		ΔP (bar)	---
Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	1.5	Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	---
Optional Process Pump	Max Flow (mc/h@bar)	42@2.6	Optional Process Pump	Max Flow (mc/h@bar)	---
	Min Flow (mc/h@bar)	12@3.8		Min Flow (mc/h@bar)	---
	Input (kW) <sup>3,4</sup>	4		Input (kW) <sup>3,4</sup>	---
Optional Tank Volume (l)	670		Optional Tank Volume (l)	---	

  

ELECTRICAL DATA (400/3/50)			
Installed Power (kW) AC/TC Fans <sup>5</sup>	78.0	Installed Power (kW) AC/TC Fans <sup>5</sup>	---
Installed Power (kW) EC Fans <sup>5</sup>	77.9	Installed Power (kW) EC Fans <sup>5</sup>	---
Installed Power (kW) EH Fans <sup>5</sup>	82.4	Installed Power (kW) EH Fans <sup>5</sup>	---

<sup>1</sup> Nominal capacities are indicated in bold italics (10°C water to process, 35°C ambient air).  
<sup>2</sup> At nominal capacity and 5°C ΔT. Shell & tube evaporators are not available with evaporator pump, process pump and tank configurations.  
<sup>3</sup> Deduct 0.7 kW from listed capacities per pump kW.  
<sup>4</sup> Add to installed power factors.  
<sup>5</sup> Data for electrical protection devices only. Add optional pump power inputs. The installing contractor is responsible for conformance to all safety codes. Consult factory for fan selections.  
<sup>6</sup> Do **NOT** use the data in this document for construction purposes. Specifications are subject to change without notice.  
<sup>7</sup> At nominal operating conditions including compressors only.



## Model 3HM280

COOLING CAPACITIES (KW) <sup>1</sup>														
Ambient Air (°C)	Coolant Supply To Process (°C)													
	ST Version (Minimum Ambient: -15°C)							HT Version (Minimum Ambient: 5°C)						
	30% Ethylene Glycol Solution			Pure Water (No Glycol)										
	-5	0	5	7	10	15	18	7	10	15	17½	20	22½	25
25	143	169	198	228	250	288	312	---	---	---	---	---	---	---
30	135	159	186	215	236	272	295	---	---	---	---	---	---	---
35	127	150	175	202	<b>221</b>	256	278	---	---	---	---	---	---	---
40	120	140	164	189	207	240	261	---	---	---	---	---	---	---
43	115	134	157	182	199	230	251	---	---	---	---	---	---	---
45	---	---	---	---	---	---	---	---	---	---	---	---	---	---
50	---	---	---	---	---	---	---	---	---	---	---	---	---	---
55	---	---	---	---	---	---	---	---	---	---	---	---	---	---

PHYSICAL DATA <sup>6</sup>							
ST Version				HT Version			
Comp (no)	2	Fans (no x kW) <sup>C</sup>	4 x 1.94	Comp (no)	---	Fans (no x kW) <sup>C</sup>	---
Comp (hp)	40	Air Flow (m³/sec)	22.64	Comp (hp)	---	Air Flow (m³/sec)	---
Refrigeration Circuits	1	Connections (Victaulic) <sup>D</sup>	DN80 (3")	Refrigeration Circuits	---	Connections (Victaulic) <sup>D</sup>	---
Comp Power (kW) <sup>7</sup>	67.1	Length (mm) <sup>B</sup>	5575	Comp Power (kW) <sup>7</sup>	---	Length (mm) <sup>B</sup>	---
		Width (mm)	1160			Width (mm)	---
Shipping Weight (kg) <sup>A</sup>	1670	Height (mm) <sup>B</sup>	2130	Shipping Weight (kg) <sup>A</sup>	---	Height (mm) <sup>B</sup>	---
Operating Weight (kg) <sup>A</sup>	2500	Sound Level (dB(A) @ 10 m) <sup>C</sup>	60.4	Operating Weight (kg) <sup>A</sup>	---	Sound Level (dB(A) @ 10 m) <sup>C</sup>	---

<sup>A</sup> Maximum weight with evaporator pump, process pump and reservoir. Consult factory for other configurations.  
<sup>B</sup> Height with AC/TC fans. Add 35 mm for EC fans, 53 mm for EH fans. Consult factory for fan selections and applications. Add 300 mm to length for piping connections and control HMI.  
<sup>C</sup> Data with AC/TC fans. Consult factory for other fan types.  
<sup>D</sup> Victaulic flange adapters are provided.

HYDRAULIC DATA					
ST Version			HT Version		
Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	38	Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	---
	ΔP (bar)	0.5		ΔP (bar)	---
Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	38	Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	---
	ΔP (bar)	0.5		ΔP (bar)	---
Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	3	Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	---
Optional Process Pump	Max Flow (mc/h@bar)	75@2.6	Optional Process Pump	Max Flow (mc/h@bar)	---
	Min Flow (mc/h@bar)	23@3.9		Min Flow (mc/h@bar)	---
	Input (kW) <sup>3,4</sup>	7.5		Input (kW) <sup>3,4</sup>	---
Optional Tank Volume (l)	920	Optional Tank Volume (l)	---	---	---

ELECTRICAL DATA (400/3/50)			
Installed Power (kW) AC/TC Fans <sup>5</sup>	97.8	Installed Power (kW) AC/TC Fans <sup>5</sup>	---
Installed Power (kW) EC Fans <sup>5</sup>	97.6	Installed Power (kW) EC Fans <sup>5</sup>	---
Installed Power (kW) EH Fans <sup>5</sup>	103.6	Installed Power (kW) EH Fans <sup>5</sup>	---

<sup>1</sup> Nominal capacities are indicated in bold italics (10°C water to process, 35°C ambient air).  
<sup>2</sup> At nominal capacity and 5°C ΔT. Shell & tube evaporators are not available with evaporator pump, process pump and tank configurations.  
<sup>3</sup> Deduct 0.7 kW from listed capacities per pump kW.  
<sup>4</sup> Add to installed power factors.  
<sup>5</sup> Data for electrical protection devices only. Add optional pump power inputs. The installing contractor is responsible for conformance to all safety codes. Consult factory for fan selections.  
<sup>6</sup> Do **NOT** use the data in this document for construction purposes. Specifications are subject to change without notice.  
<sup>7</sup> At nominal operating conditions including compressors only.



## Model 3HM290

COOLING CAPACITIES (KW) <sup>1</sup>														
Ambient Air (°C)	Coolant Supply To Process (°C)													
	ST Version (Minimum Ambient: -15°C)							HT Version (Minimum Ambient: 5°C)						
	30% Ethylene Glycol Solution				Pure Water (No Glycol)									
	-5	0	5	7	10	15	18	7	10	15	17½	20	22½	25
25	137	164	193	224	246	285	310	187	208	247	267	272	272	272
30	129	154	182	211	232	269	293	177	197	234	254	259	259	259
35	121	144	170	198	<b>217</b>	253	276	167	<b>187</b>	222	241	245	245	245
40	113	134	159	184	203	237	258	158	176	210	228	232	232	232
43	108	128	152	177	194	227	248	152	170	203	221	224	224	224
45	---	---	---	---	---	---	---	148	165	198	215	219	219	219
50	---	---	---	---	---	---	---	138	155	185	202	206	206	206
55	---	---	---	---	---	---	---	129	144	173	189	193	193	193

PHYSICAL DATA <sup>6</sup>							
ST Version				HT Version			
Comp (no)	4	Fans (no x kW) <sup>C</sup>	4 x 1.94	Comp (no)	4	Fans (no x kW) <sup>C</sup>	4 x 1.94
Comp (hp)	20	Air Flow (m³/sec)	22.64	Comp (hp)	25	Air Flow (m³/sec)	22.64
Refrigeration Circuits	2	Connections (Victaulic) <sup>D</sup>	DN80 (3")	Refrigeration Circuits	2	Connections (Victaulic) <sup>D</sup>	DN80 (3")
Comp Power (kW) <sup>7</sup>	65.2	Length (mm) <sup>B</sup>	3505	Comp Power (kW) <sup>7</sup>	54.0	Length (mm) <sup>B</sup>	3505
		Width (mm)	2260			Width (mm)	2260
Shipping Weight (kg) <sup>A</sup>	1830	Height (mm) <sup>B</sup>	2130	Shipping Weight (kg) <sup>A</sup>	2010	Height (mm) <sup>B</sup>	2130
Operating Weight (kg) <sup>A</sup>	2660	Sound Level (dB(A) @ 10 m) <sup>C</sup>	58.0	Operating Weight (kg) <sup>A</sup>	2840	Sound Level (dB(A) @ 10 m) <sup>C</sup>	63.1

<sup>A</sup> Maximum weight with evaporator pump, process pump and reservoir. Consult factory for other configurations.

<sup>B</sup> Height with AC/TC fans. Add 35 mm for EC fans, 53 mm for EH fans. Consult factory for fan selections and applications. Add 300 mm to length for piping connections and control HMI.

<sup>C</sup> Data with AC/TC fans. Consult factory for other fan types.

<sup>D</sup> Victaulic flange adapters are provided.

HYDRAULIC DATA					
ST Version			HT Version		
Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	37	Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	32
	ΔP (bar)	0.5		ΔP (bar)	0.4
Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	37	Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	32
	ΔP (bar)	0.4		ΔP (bar)	0.3
Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	3	Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	3
Optional Process Pump	Max Flow (mc/h@bar)	75@2.6	Optional Process Pump	Max Flow (mc/h@bar)	75@2.6
	Min Flow (mc/h@bar)	23@3.9		Min Flow (mc/h@bar)	23@3.9
	Input (kW) <sup>3,4</sup>	7.5		Input (kW) <sup>3,4</sup>	7.5
Optional Tank Volume (l)		420	Optional Tank Volume (l)		420

ELECTRICAL DATA (400/3/50)			
Installed Power (kW) AC/TC Fans <sup>5</sup>	98.2	Installed Power (kW) AC/TC Fans <sup>5</sup>	92.6
Installed Power (kW) EC Fans <sup>5</sup>	98.0	Installed Power (kW) EC Fans <sup>5</sup>	92.4
Installed Power (kW) EH Fans <sup>5</sup>	104.0	Installed Power (kW) EH Fans <sup>5</sup>	98.4

<sup>1</sup> Nominal capacities are indicated in bold italics (10°C water to process, 35°C ambient air).

<sup>2</sup> At nominal capacity and 5°C ΔT. Shell & tube evaporators are not available with evaporator pump, process pump and tank configurations.

<sup>3</sup> Deduct 0.7 kW from listed capacities per pump kW.

<sup>4</sup> Add to installed power factors.

<sup>5</sup> Data for electrical protection devices only. Add optional pump power inputs. The installing contractor is responsible for conformance to all safety codes. Consult factory for fan selections.

<sup>6</sup> Do **NOT** use the data in this document for construction purposes. Specifications are subject to change without notice.

<sup>7</sup> At nominal operating conditions including compressors only.



## Model 3HM370

COOLING CAPACITIES (KW) <sup>1</sup>														
Ambient Air (°C)	Coolant Supply To Process (°C)													
	ST Version (Minimum Ambient: -15°C)							HT Version (Minimum Ambient: 5°C)						
	30% Ethylene Glycol Solution			Pure Water (No Glycol)										
	-5	0	5	7	10	15	18	7	10	15	17½	20	22½	25
25	173	205	242	280	307	355	386	232	259	306	331	337	337	337
30	163	193	228	264	289	335	365	221	246	291	316	321	321	321
35	154	182	214	247	<b>272</b>	315	343	209	<b>233</b>	276	300	305	305	305
40	144	170	200	231	254	295	322	198	220	261	284	289	289	289
43	138	163	191	222	243	283	309	191	212	253	274	279	279	279
45	---	---	---	---	---	---	---	186	207	247	268	273	273	273
50	---	---	---	---	---	---	---	174	194	232	252	257	257	257
55	---	---	---	---	---	---	---	163	182	217	236	240	240	240

PHYSICAL DATA <sup>6</sup>							
ST Version				HT Version			
Comp (no)	4	Fans (no x kW) <sup>C</sup>	6 x 1.94	Comp (no)	4	Fans (no x kW) <sup>C</sup>	6 x 1.94
Comp (hp)	25	Air Flow (m³/sec)	33.96	Comp (hp)	30	Air Flow (m³/sec)	33.96
Refrigeration Circuits	2	Connections (Victaulic) <sup>D</sup>	DN80 (3")	Refrigeration Circuits	2	Connections (Victaulic) <sup>D</sup>	DN80 (3")
Comp Power (kW) <sup>7</sup>	81.3	Length (mm) <sup>B</sup>	4540	Comp Power (kW) <sup>7</sup>	64.9	Length (mm) <sup>B</sup>	4540
		Width (mm)	2260			Width (mm)	2260
Shipping Weight (kg) <sup>A</sup>	2270	Height (mm) <sup>B</sup>	2130	Shipping Weight (kg) <sup>A</sup>	2330	Height (mm) <sup>B</sup>	2130
Operating Weight (kg) <sup>A</sup>	3320	Sound Level (dB(A) @ 10 m) <sup>C</sup>	60.6	Operating Weight (kg) <sup>A</sup>	3390	Sound Level (dB(A) @ 10 m) <sup>C</sup>	64.9

<sup>A</sup> Maximum weight with evaporator pump, process pump and reservoir. Consult factory for other configurations.  
<sup>B</sup> Height with AC/TC fans. Add 35 mm for EC fans, 53 mm for EH fans. Consult factory for fan selections and applications. Add 300 mm to length for piping connections and control HMI.  
<sup>C</sup> Data with AC/TC fans. Consult factory for other fan types.  
<sup>D</sup> Victaulic flange adapters are provided.

HYDRAULIC DATA					
ST Version			HT Version		
Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	47	Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	40
	ΔP (bar)	0.5		ΔP (bar)	0.4
Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	47	Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	40
	ΔP (bar)	0.6		ΔP (bar)	0.5
Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	3	Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	3
Optional Process Pump	Max Flow (mc/h@bar)	75@2.6	Optional Process Pump	Max Flow (mc/h@bar)	75@2.6
	Min Flow (mc/h@bar)	23@3.9		Min Flow (mc/h@bar)	23@3.9
	Input (kW) <sup>3,4</sup>	7.5		Input (kW) <sup>3,4</sup>	7.5
Optional Tank Volume (l)	670	Optional Tank Volume (l)	670	Optional Tank Volume (l)	670

ELECTRICAL DATA (400/3/50)			
Installed Power (kW) AC/TC Fans <sup>5</sup>	122.0	Installed Power (kW) AC/TC Fans <sup>5</sup>	114.0
Installed Power (kW) EC Fans <sup>5</sup>	121.8	Installed Power (kW) EC Fans <sup>5</sup>	113.8
Installed Power (kW) EH Fans <sup>5</sup>	130.8	Installed Power (kW) EH Fans <sup>5</sup>	122.8

<sup>1</sup> Nominal capacities are indicated in bold italics (10°C water to process, 35°C ambient air).  
<sup>2</sup> At nominal capacity and 5°C ΔT. Shell & tube evaporators are not available with evaporator pump, process pump and tank configurations.  
<sup>3</sup> Deduct 0.7 kW from listed capacities per pump kW.  
<sup>4</sup> Add to installed power factors.  
<sup>5</sup> Data for electrical protection devices only. Add optional pump power inputs. The installing contractor is responsible for conformance to all safety codes. Consult factory for fan selections.  
<sup>6</sup> Do **NOT** use the data in this document for construction purposes. Specifications are subject to change without notice.  
<sup>7</sup> At nominal operating conditions including compressors only.



## Model 3HM460

COOLING CAPACITIES (kW) <sup>1</sup>														
Ambient Air (°C)	Coolant Supply To Process (°C)													
	ST Version (Minimum Ambient: -15°C)							HT Version (Minimum Ambient: 5°C)						
	30% Ethylene Glycol Solution			Pure Water (No Glycol)										
	-5	0	5	7	10	15	18	7	10	15	17½	20	22½	25
25	221	263	310	359	393	455	494	---	---	---	---	---	---	---
30	209	248	292	338	370	429	466	---	---	---	---	---	---	---
35	196	233	274	317	<b>347</b>	402	438	---	---	---	---	---	---	---
40	184	217	256	296	324	376	410	---	---	---	---	---	---	---
43	177	208	245	283	311	361	393	---	---	---	---	---	---	---
45	---	---	---	---	---	---	---	---	---	---	---	---	---	---
50	---	---	---	---	---	---	---	---	---	---	---	---	---	---
55	---	---	---	---	---	---	---	---	---	---	---	---	---	---

PHYSICAL DATA <sup>6</sup>							
ST Version				HT Version			
Comp (no)	4	Fans (no x kW) <sup>C</sup>	6 x 1.94	Comp (no)	---	Fans (no x kW) <sup>C</sup>	---
Comp (hp)	30	Air Flow (m³/sec)	33.96	Comp (hp)	---	Air Flow (m³/sec)	---
Refrigeration Circuits	2	Connections (Victaulic) <sup>D</sup>	DN80 (3")	Refrigeration Circuits	---	Connections (Victaulic) <sup>D</sup>	---
Comp Power (kW) <sup>7</sup>	106.3	Length (mm) <sup>B</sup>	4540	Comp Power (kW) <sup>7</sup>	---	Length (mm) <sup>B</sup>	---
		Width (mm)	2260			Width (mm)	---
Shipping Weight (kg) <sup>A</sup>	2320	Height (mm) <sup>B</sup>	2130	Shipping Weight (kg) <sup>A</sup>	---	Height (mm) <sup>B</sup>	---
Operating Weight (kg) <sup>A</sup>	3380	Sound Level (dB(A) @ 10 m) <sup>C</sup>	62.0	Operating Weight (kg) <sup>A</sup>	---	Sound Level (dB(A) @ 10 m) <sup>C</sup>	---

HYDRAULIC DATA					
ST Version			HT Version		
Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	60	Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	---
	ΔP (bar)	0.5		ΔP (bar)	---
Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	60	Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	---
	ΔP (bar)	0.6		ΔP (bar)	---
Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	3	Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	---
Optional Process Pump	Max Flow (mc/h@bar)	75@2.6	Optional Process Pump	Max Flow (mc/h@bar)	---
	Min Flow (mc/h@bar)	23@3.9		Min Flow (mc/h@bar)	---
	Input (kW) <sup>3,4</sup>	7.5		Input (kW) <sup>3,4</sup>	---
Optional Tank Volume (l)	670	Optional Tank Volume (l)	---	---	---

  

ELECTRICAL DATA (400/3/50)			
Installed Power (kW) AC/TC Fans <sup>5</sup>	156.0	Installed Power (kW) AC/TC Fans <sup>5</sup>	---
Installed Power (kW) EC Fans <sup>5</sup>	155.8	Installed Power (kW) EC Fans <sup>5</sup>	---
Installed Power (kW) EH Fans <sup>5</sup>	164.8	Installed Power (kW) EH Fans <sup>5</sup>	---

<sup>A</sup> Maximum weight with evaporator pump, process pump and reservoir. Consult factory for other configurations.  
<sup>B</sup> Height with AC/TC fans. Add 35 mm for EC fans, 53 mm for EH fans. Consult factory for fan selections and applications. Add 300 mm to length for piping connections and control HMI.  
<sup>C</sup> Data with AC/TC fans. Consult factory for other fan types.  
<sup>D</sup> Victaulic flange adapters are provided.

<sup>1</sup> Nominal capacities are indicated in bold italics (10°C water to process, 35°C ambient air).  
<sup>2</sup> At nominal capacity and 5°C ΔT. Shell & tube evaporators are not available with evaporator pump, process pump and tank configurations.  
<sup>3</sup> Deduct 0.7 kW from listed capacities per pump kW.  
<sup>4</sup> Add to installed power factors.  
<sup>5</sup> Data for electrical protection devices only. Add optional pump power inputs. The installing contractor is responsible for conformance to all safety codes. Consult factory for fan selections.  
<sup>6</sup> Do **NOT** use the data in this document for construction purposes. Specifications are subject to change without notice.  
<sup>7</sup> At nominal operating conditions including compressors only.



## Model 3HM580

COOLING CAPACITIES (KW) <sup>1</sup>														
Ambient Air (°C)	Coolant Supply To Process (°C)													
	ST Version (Minimum Ambient: -15°C)							HT Version (Minimum Ambient: 5°C)						
	30% Ethylene Glycol Solution			Pure Water (No Glycol)										
	-5	0	5	7	10	15	18	7	10	15	17½	20	22½	25
25	286	338	395	457	499	576	625	---	---	---	---	---	---	---
30	270	318	373	431	471	544	590	---	---	---	---	---	---	---
35	255	299	350	405	<b>443</b>	512	556	---	---	---	---	---	---	---
40	239	280	328	379	415	480	522	---	---	---	---	---	---	---
43	230	269	314	363	398	461	502	---	---	---	---	---	---	---
45	---	---	---	---	---	---	---	---	---	---	---	---	---	---
50	---	---	---	---	---	---	---	---	---	---	---	---	---	---
55	---	---	---	---	---	---	---	---	---	---	---	---	---	---

PHYSICAL DATA <sup>6</sup>							
ST Version				HT Version			
Comp (no)	4	Fans (no x kW) <sup>C</sup>	8 x 1.94	Comp (no)	---	Fans (no x kW) <sup>C</sup>	---
Comp (hp)	40	Air Flow (m <sup>3</sup> /sec)	45.28	Comp (hp)	---	Air Flow (m <sup>3</sup> /sec)	---
Refrigeration Circuits	2	Connections (Victaulic) <sup>D</sup>	DN100 (4")	Refrigeration Circuits	---	Connections (Victaulic) <sup>D</sup>	---
Comp Power (kW) <sup>7</sup>	134.3	Length (mm) <sup>B</sup>	5575	Comp Power (kW) <sup>7</sup>	---	Length (mm) <sup>B</sup>	---
		Width (mm)	2260			Width (mm)	---
Shipping Weight (kg) <sup>A</sup>	2990	Height (mm) <sup>B</sup>	2130	Shipping Weight (kg) <sup>A</sup>	---	Height (mm) <sup>B</sup>	---
Operating Weight (kg) <sup>A</sup>	4080	Sound Level (dB(A) @ 10 m) <sup>C</sup>	63.2	Operating Weight (kg) <sup>A</sup>	---	Sound Level (dB(A) @ 10 m) <sup>C</sup>	---

<sup>A</sup> Maximum weight with evaporator pump, process pump and reservoir. Consult factory for other configurations.  
<sup>B</sup> Height with AC/TC fans. Add 35 mm for EC fans, 53 mm for EH fans. Consult factory for fan selections and applications. Add 300 mm to length for piping connections and control HMI.  
<sup>C</sup> Data with AC/TC fans. Consult factory for other fan types.  
<sup>D</sup> Victaulic flange adapters are provided.

HYDRAULIC DATA					
ST Version			HT Version		
Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	76	Braze Plate Evaporator <sup>2</sup>	Flow (mc/h)	---
	ΔP (bar)	0.5		ΔP (bar)	---
Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	76	Shell & Tube Evaporator <sup>2</sup>	Flow (mc/h)	---
	ΔP (bar)	0.6		ΔP (bar)	---
Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	4	Optional Evaporator Pump	Input (kW) <sup>3,4</sup>	---
Optional Process Pump	Max Flow (mc/h@bar)	135@1.7	Optional Process Pump	Max Flow (mc/h@bar)	---
	Min Flow (mc/h@bar)	42@3.5		Min Flow (mc/h@bar)	---
	Input (kW) <sup>3,4</sup>	9.2		Input (kW) <sup>3,4</sup>	---
Optional Tank Volume (l)	920	Optional Tank Volume (l)	---	---	

  

ELECTRICAL DATA (400/3/50)			
Installed Power (kW) AC/TC Fans <sup>5</sup>	195.5	Installed Power (kW) AC/TC Fans <sup>5</sup>	---
Installed Power (kW) EC Fans <sup>5</sup>	195.2	Installed Power (kW) EC Fans <sup>5</sup>	---
Installed Power (kW) EH Fans <sup>5</sup>	207.2	Installed Power (kW) EH Fans <sup>5</sup>	---

<sup>1</sup> Nominal capacities are indicated in bold italics (10°C water to process, 35°C ambient air).  
<sup>2</sup> At nominal capacity and 5°C ΔT. Shell & tube evaporators are not available with evaporator pump, process pump and tank configurations.  
<sup>3</sup> Deduct 0.7 kW from listed capacities per pump kW.  
<sup>4</sup> Add to installed power factors.  
<sup>5</sup> Data for electrical protection devices only. Add optional pump power inputs. The installing contractor is responsible for conformance to all safety codes. Consult factory for fan selections.  
<sup>6</sup> Do **NOT** use the data in this document for construction purposes. Specifications are subject to change without notice.  
<sup>7</sup> At nominal operating conditions including compressors only.