

FCH Series **50-700 kW Dielectric Fluid Coolers**



FCH015S01 (50 kW)



FCH029S03 (150 kW)



FCH058L01 (350 kW)



FCH058S02 (350 kW)








FCH116S02 (700 kW)

Silver Linings Systems (SLS) Advantages

- **30% lower liquid coolant volume over round tube plate-fin units.**
- **Cooling capacity per liter of coolant at 0.1 kW per liter.**
- **Cooling capacity per power input at 27 kW per kW.**
- **Cooling capacity per packing volume at 28 kW per m³.**
- **All construction materials compatible with water.**
- **All materials rated for harsh environments.**
- **Completely manufactured in North America.**
- **Can be used in direct or indirect immersion systems.**
- **SLS service agreements available for global support.**
- **Full engineering and design support available.**

Dielectric Fluid Coolers (FCH Series)

											
Cooling Capacity¹	Units										
SLS Part Number		FCH015S01	FCH029S03	FCH058S02	FCH058L01	FCH116S02					
Airflow Orientation		Bottom to Top	Bottom to Top	Bottom to Top	Bottom to Top	Bottom to Top					
Min Outdoor Temp Rating	°C [°F]	-29 [-20]	-29 [-20]	-29 [-20]	-29 [-20]	-29 [-20]					
Max Outdoor Temp Rating	°C [°F]	49 [120]	49 [120]	49 [120]	49 [120]	49 [120]					
Fan Speed Control		Not applicable	Staging	Staging	Staging	Staging					
Voltage / Phase/Frequency	V / φ / Hz	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60					
Full Load Amps	Amp	6.8	13.6	27.2	27.2	54.4					
Min Circuit Ampacity	Amp	8.5	15.3	28.9	28.9	56.1					
Max Overcurrent Protection	Amp	15.3	22	35.7	35.7	62.9					
Total Power Consumption	kW	3.35	6.7	13.4	13.4	26.8					
Recommended Breaker Size	Amp	15	20	40	40	75					
Electrical Connection Location		Bottom of Motor Control Box	Bottom of Motor Control Box	Bottom of Motor Control Box	Bottom of Motor Control Box	Bottom of Motor Control Box					
Cooling Coil		Single Pass Aluminum Coil	Single Pass Aluminum Coil	Two Pass Aluminum Coil	Single Pass Aluminum Coil	Single Pass Aluminum Coil					
Max Pressure Rating	kPa(g) [psi(g)]	103 [15]	103 [15]	103 [15]	103 [15]	103 [15]					
Fan Quantity		1	2	4	4	8					
Fan Diameter	mm [in]	789 [31.06]	789 [31.06]	789 [31.06]	789 [31.06]	789 [31.06]					
Max Volumetric Airflow	SCFM	13,500	27,000	54,000	54,000	108,000					
Sound Pressure Level ²	dBA	71	74	80	80	92					
Min Coolant Flow ³	LPM [GPM]	76[20]	246 [65]	643[170]	643[170]	1268[335]					
Coolant Pressure Drop	kPa(d) [psi(d)]	0.07 [0.010]	1.3 [0.187]	15.9 [2.3]	15.9 [2.3]	15.9 [2.3]					
Plumbing Connections ⁴		3.5" Blank Alum Tube	3.5" Blank Alum Tube	3.5" Blank Alum Tube	3.5" Blank Alum Tube	3.5" Blank Alum Tube					
Coolant Volume	L [gal]	20.5 [5.3]	28 [7.5]	56 [15]	79 [21]	185 [49]					
Vent Fitting Type/Size		SAE #4	SAE #4	SAE #4	SAE #4	SAE #4					
Drain Fitting Type/Size		SAE #8	SAE #8	SAE #8	SAE #8	SAE #8					
Exterior Dimensions - Length	m [in]	1.67 [65.6"]	2.74 [108"]	3.05 [120"]	5.54 [216"]	5.89 [232"]					
Exterior Dimensions - Width	m [in]	1.28 [50.6"]	1.28 [50.6"]	2.49 [98"]	1.28 [50.6"]	2.49 [98"]					
Exterior Dimensions - Height	m [in]	1.56 [61.4"]	1.56 [61.4"]	1.56 [61.4"]	1.56 [61.4"]	1.56 [61.4"]					
General Construction Material		11 and 14 Gauge Galvanized Steel	11 and 14 Gauge Galvanized Steel	11 and 14 Gauge Galvanized Steel	11 and 14 Gauge Galvanized Steel	11 and 14 Gauge Galvanized Steel					
Dry Weight	kg [lbs]	316 [695]	465 [1023]	844 [1876]	948 [2086]	1721 [3787]					

All models ship on IPSM-15 compliant skid

Lifting provisions, site installation or service details, drawings available upon request

¹ For industry standard dielectric coolant with 45°F (25°C) Entering Temperature Differential (ETD) and 2.5 L/Minute per kW flowrate

² As calculated @ 23 feet (7m) from fans

³ Minimum coolant flow to achieve cooling capacity rating

⁴ Aeroquip couplings not included