

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



FCH015S01 (50 kW)



FCH029S01 (150 kW)



FCH058S02 (350 kW)



FCH058S01 (350 kW)




FCH116S01 (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 dielectric fluids (Hydrocarbon Oils).**
- **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 Capacity ¹	Units	50 kW	150 kW	350 kW	350 kW	350 kW	700 kW				
SLS Part Number		FCH015S01	FCH029S01	FCH058S01	FCH058S02	FCH116S01					
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	°F	49 [120]	49 [120]	49 [120]	49 [120]	49 [120]					
Fan Speed Control		On/Off or Variable Speed Option	Staging or Variable Speed Option	Staging or Variable Speed Option	Staging or Variable Speed Option	Staging or Variable Speed Option					
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	7	12	21	21	42					
Min Circuit Ampacity	Amp	15	12	22	22	43					
Max Overcurrent Protection	Amp	15	20	30	30	50					
Total Power Consumption	kW	3.2	6.4	12.8	12.8	25.6					
Recommended Breaker Size	Amp	15	20	30	30	60					
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	Dual 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]	910 [36]	910 [36]	910 [36]	910 [36]	910 [36]					
Max Volumetric Airflow	SCFM	14,000	28,000	56,000	56,000	112,000					
Sound Pressure Level ²	dBA	63	65	68	68	71					
Min Coolant Flow ³	LPM [GPM]	132 [35]	379 [100]	871 [230]	871 [230]	1779 [470]					
Internal Pressure Drop	kPa(d) [psi(d)]	0.7 [0.1]	3.4 [0.5]	33.8 [4.9]	33.8 [4.9]	35.2 [5.1]					
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]	30 [8]	57 [15]	136 [36]	114 [30]	227 [60]					
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	in [ft] [m]	70 [5', 10"] [1.78]	115 [9', 7"] [2.92]	123 [10', 3"] [3.12]	220 [18', 4"] [5.59]	238 [19', 10"] [6.05]					
Exterior Dimensions - Width	in [ft] [m]	51 [4', 3"] [1.30]	51 [4', 3"] [1.30]	98 [8', 2"] [2.49]	51 [4', 3"] [1.30]	98 [8', 2"] [2.49]					
Exterior Dimensions - Height	in [ft] [m]	65 [5', 5"] [1.65]	65 [5', 5"] [1.65]	65 [5', 5"] [1.65]	65 [5', 5"] [1.65]	65 [5', 5"] [1.65]					
General Construction Material		11 and 16 Gauge Galvanized Steel	11 and 16 Gauge Galvanized Steel	11 and 16 Gauge Galvanized Steel	11 and 16 Gauge Galvanized Steel	11 and 16 Gauge Galvanized Steel					
Dry Weight	kg [lbs]	310 [683]	528 [1164]	975 [2150]	1059 [2335]	1964 [4329]					

For 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