

Silcovert TH

Water cooled version



The broadest, most reliable range of PWM drives on the market today

General Overview

SILCOVERT TH is a series of medium voltage PWM Voltage Source Inverters for the most demanding applications where reliability and performance are fundamental requirements.

Built around the most up-to-date IGBT technology, its multi-level structure makes it suitable for driving any motor at variable speed in the power range from 400 kVA to 100 MVA up to 13.8 kV.

Cooling System

Water cooled solutions are available with redundant systems for enhanced reliability. The water-cooled system significantly reduces ventilation and air conditioning costs for high power applications.

Our water cooled drives are ideal for industries like Metals and Cement where pollutants can compromise long-term performance. They are available within cooling option with external chiller.

High performance Drive Series

Efficiency >98%

High efficiency is a must for our drives. A well proven design using the most up-to-date IGBT technology is the basis of the product's reliability. Rigorous quality control during manufacturing guarantees the excellence of our inverters.

Network harmonics $\leq 3\%$

Our MV drives ensure excellent power factor line-side in every working condition due to the full-wave rectification using multiphase diode operation. The harmonic content meets the most stringent requirements for current and voltage harmonic distortion as defined by IEC and NEMA standards.

MTBF 200.000 hours

The selection of first-class core components such as film capacitors (instead of electrolytic capacitors), high-quality cooling fans from leading manufacturers, tin plated copper bars suitable for harsh environments, and rigorous insulating clearances contribute to maximize availability of the drive.

High Power

By placing modules in parallel we can rapidly configure the drive to match power needs up to 100 MVA (4 containers/VFD in parallel).

Flexibility

We offer a modular and flexible solution, suitable for cabinet and container installation for a wide variety of applications.

Compact

We offer one of the most compact footprints on the market today.

Technical Data

Series 7000 Water Cooled Version - No Overload					
Motor Shaft Power (kW)	Output Capacity (kVA)	Rated Output Current (A)	Model	*Dimensions (L x W x H)	Weight (kg)
4160 V					
3460	3963	550	SVTH 4K0W41 24P	4300x1400x2410	6800
4089	4683	650	SVTH 4K7W41 24P	4300x1400x2410	6800
5032	5764	800	SVTH 5K8W41 24P	4300x1400x2410	6800
7234	8286	1150	SVTH 8K3W41 24P	6100x1600x2410	12800
9435	10808	1500	SVTH 10K8 A41 24P	6100x1600x2410	12800
10693	12249	1700	SVTH 12K2W41 24P	6100x1600x2410	12800
6000 V					
4990	5716	550	SVTH 5K7W60 30P	4900x1400x2410	7500
5897	6755	650	SVTH 6K8W60 30P	4900x1400x2410	7500
7258	8314	800	SVTH 8K3W60 30P	4900x1400x2410	7500
10433	11951	1150	SVTH 12K0W60 30P	7000x1600x2410	14500
13609	15588	1500	SVTH 15K6W60 30P	7000x1600x2410	14500
15423	17667	1700	SVTH 17K7W60 30P	7000x1600x2410	14500
6600 V					
5489	6287	550	SVTH 6K3W66 36P	5300x1400x2410	8200
6487	7430	650	SVTH 7K4W66 36P	5300x1400x2410	8200
7984	9145	800	SVTH 9K1W66 36P	5300x1400x2410	8200
11477	13146	1150	SVTH 13K1W66 36P	7900x1600x2410	15900
14970	17147	1500	SVTH 17K1W66 36P	7900x1600x2410	15900
16966	19434	1700	SVTH 19K4W66 36P	9100x1600x2410	15900
7200 V					
5988	6859	550	SVTH 6K9W72 36P	5300x1400x2410	8200
7077	8106	650	SVTH 8K1W72 36P	5300x1400x2410	8200
8710	9977	800	SVTH 10K0W72 36P	5300x1400x2410	8200
12520	14341	1150	SVTH 14K3W72 36P	7900x1600x2410	15900
16330	18706	1500	SVTH 18K7W72 36P	7900x1600x2410	15900
18508	21200	1700	SVTH 21K2W72 36P	7900x1600x2410	15900
Series 14000 Water cooled version – No overload					
Motor Shaft Power (kW)	Output Capacity (kVA)	Rated Output Current (A)	Model	*Dimensions (L x W x H)	Weight (kg)
10000 V					
8468	9699	560	SVTH 9K7 W10 24P	5800x1400x2600	12900
10585	12124	700	SVTH 12K1 W10 24P	5800x1400x2600	12900
12701	14549	840	SVTH 14K5 W10 24P	6600x1600x2600	14300
15877	18187	1050	SVTH 18K2 W10 24P	6600x1600x2600	14300
19052	21824	1260	SVTH 21K8 W10 24P	6600x1600x2600	14300
11000 V					
9314	10669	560	SVTH 10K7 W11 30P	6600x1400x2600	14200
11643	13337	700	SVTH 13K3 W11 30P	6600x1400x2600	14200
13972	16004	840	SVTH 16K0 W11 30P	7600x1600x2600	16200
17465	20005	1050	SVTH 20K0 W11 30P	7600x1600x2600	16200
20957	24006	1260	SVTH 24K0 W11 30P	7600x1600x2600	16200
13800 V					
11685	13385	560	SVTH 13K4 W13 36P	7400x1400x2600	16100
14607	16732	700	SVTH 16K7 W13 36P	7400x1400x2600	16100
17528	20078	840	SVTH 20K1 W13 36P	8600x1600x2600	18100
21910	25097	1050	SVTH 25K1 W13 36P	8600x1600x2600	18100
26292	30117	1260	SVTH 30K1 W13 36P	8600x1600x2600	18100

Data about 110% Class 1 and 150% Class 2 is available by request.
Higher power ratings available upon request.

*Transformer not included