

Induction heating transistor generators SM Type

The SM generator series includes the traditional advantages of the Transithermic® family of generators (high reliability, easy use, superior efficiency) in a series circuit design.

The standard version includes the GH TouchHMI user interface based on the latest screen technology. A full colour panoramic IPS TFT touch screen which enables to display the generator parameters and configuration.



Transithermic® SM 50 kW view

The SM generator is the most suitable solution for induction heating applications at medium frequencies between 2 and 20 kHz. For medium power SM generator is able to cover between 20 kHz and 150 kHz.

Other functionalities

- Energy monitoring
- Current, power, energy or T^a regulation modes
- Process control
- Program storage
- Events log
- Dew point control system (optional)

SM type transistor generator for induction heating Medium frequency with series oscillating circuit

General characteristics

- Design for series oscillating circuit
- Modular design with plug-in power control cards
- Frequency: 2 - 20 kHz for whole range and 20-150 kHz up to 100 kW
- Power: 12 kW to 800 kW
- Efficiency: > 90%
- Cos φ: > 0.95
- Protection: IP 54 (standard) or IP 55
- TouchHMI: Full colours TFT touch screen, IPS and led backlight technology and Wide VGA (800x480) format.
- Optional field bus interfaces: Interbus, Profibus, Profinet, DeviceNet, Ethernet or others on request
- Optional multioutput version

Technical features

Output continuous power	kW	12		25		50		75		100	
Model	Units	12SM20	12SM150	25SM20	25SM150	50SM20	50SM150	75SM20	75SM150	100SM20	100SM150
Frequency	kHz	[2, 20]	[20, 150]	[2, 20]	[20, 150]	[2, 20]	[20, 150]	[2, 20]	[20, 150]	[2, 20]	[20, 150]
Power supply	kVA	15	15	31,25	31,25	62,5	62,5	93,75	93,75	125	125
Voltage supply	Vac	380-480	380-480	380-480	380-480	380-480	380-480	380-480	380-480	380-480	380-480
Generator width	in/mm	23,6/600	23,6/600	23,6/600	23,6/600	23,6/600	23,6/600	31,5/800	55,1/1400	31,5/800	55,1/1400
Generator depth	in/mm	23,6/600	31,5/800	23,6/600	31,5/800	23,6/600	31,5/800	31,5/800	31,5/800	31,5/800	31,5/800
Generator height	in/mm	39,4/1000 ⁽²⁾	70,9/1800	39,4/1000 ⁽²⁾	70,9/1800	39,4/1000 ⁽²⁾	70,9/1800	70,9/1800	70,9/1800	70,9/1800	70,9/1800
Base Socket ⁽¹⁾	in/mm	3,93 or 7,87 / 100 or 200									
Water temperature min/max	°F/°C	[68, 95] / [20, 35]									
Water supply		1"	1"	1"	1"	1"	1"	1"	1"	1"	1"
Waterflow	gpm/lpm	2,6/10	5/19	2,6/10	5/19	2,6/10	7,7/29	3,9/15	6,6/25	3,9/15	6,6/25

150	200	300	400	500	600	800
150SM20	200SM20	300SM20	400SM20	500SM20	600SM20	800SM20
[2, 20]						
187,5	250	375	500	625	750	1000
380-480	380-480	380-480	380-480	380-480	380-480	380-480
47,2/1200	47,2/1200	55,1/1400	55,1/1400	94,5/2400	94,5/2400	118,1/3000
31,5/800	31,5/800	31,5/800	31,5/800	31,5/800	31,5/800	31,5/800
70,9/1800	70,9/1800	70,9/1800	70,9/1800	70,9/1800	70,9/1800	70,9/1800
3,93 or 7,87 / 100 or 200				7,87/200	7,87/200	7,87/200
[68, 95] / [20, 35]						
1"	1"	1"	1"	1-1/4"	1-1/4"	1-1/2"
8,8/40	10,8/41	19/72	19,5/74	29,6/112	32,5/123	40,2/152

Note (1): "Base socket" is not needed when generator is part of an installation that includes platform