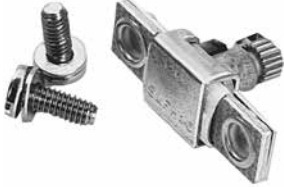


Manual Control

Heater Elements, Class SMF

General



Heater Elements Class SMF

Ordering Information

- Determine number of heater elements required from Table A.
- Determine motor full load current and service factor.
- If the motor and controller are in the same ambient temperature:
 - For 1.15 to 1.25 service factor motors use 100% of motor full load current for heater element selection.
 - For 1.0 service factor motors use 90% of motor full load current for heater element selection.
- If the motor and controller are in different ambient temperatures multiply motor full load current by the multiplier in Table B. Use the resultant full load current for heater element selection.
- Select proper heater element from table below.
- All tables are based on the operation of the motor and controller in the same ambient temperature, 40°C (104°F) or less. Always be certain the correct heater element is installed in the starter before operating the motor.

Heater Catalogue Number	Motor Full-Load Current (Amps)
SMFH01	0.157-0.173
SMFH02	0.174-0.192
SMFH03	0.193-0.212
SMFH04	0.213-0.235
SMFH05	0.236-0.261
SMFH06	0.262-0.289
SMFH07	0.290-0.321
SMFH08	0.322-0.355
SMFH09	0.356-0.399
SMFH10	0.41-0.44
SMFH11	0.45-0.49
SMFH12	0.50-0.53
SMFH13	0.54-0.58
SMFH14	0.59-0.65
SMFH15	0.66-0.71
SMFH16	0.72-0.78
SMFH17	0.79-0.85
SMFH18	0.86-0.96
SMFH19	0.97-1.04
SMFH20	1.05-1.16
SMFH21	1.17-1.25
SMFH22	1.30-1.39
SMFH23	1.38-1.54
SMFH24	1.48-1.63
SMFH25	1.57-1.75
SMFH26	1.66-1.86
SMFH27	1.80-1.99
SMFH28	1.96-2.15
SMFH29	2.16-2.38
SMFH30	2.39-2.75
SMFH31	2.76-2.84
SMFH32	2.85-3.06
SMFH33	3.07-3.45
SMFH34	3.46-3.70
SMFH35	3.71-4.07
SMFH36	4.08-4.32
SMFH37	4.33-4.90
SMFH38	4.91-5.35
SMFH39	5.36-5.85
SMFH40	5.86-6.41
SMFH41	6.42-6.79
SMFH42	6.80-7.57
SMFH43	7.58-8.15
SMFH44	8.16-8.98
SMFH45	8.99-9.67
SMFH46	9.68-9.95
SMFH47	9.96-10.8
SMFH48	10.9-12.1
SMFH49	12.2-13.1
SMFH50	13.2-13.9
SMFH51	14.0-15.0
SMFH52	15.1-16.0

Table A
Number of Heater Elements

Device	Number of Heater Elements	Notes
SMFF*1 SMFF*2 SMFF*3 SMFF*4 SMFF*5 SMFF*6	1	All single pole and two pole SMF starters require only 1 Heater Element.
SMFF*22 SMFF*44	2	Duplex Unit. One Heater Element per starter.
SMFF*11 SMFF*22	2	Two Speed Starter. One Heater Element per speed.

Table B - Special Applications
Heater Element Selection

Continuous Duty Motor Service Factor	Ambient Temperature of Motor		
	Same as Controller Ambient	Constant 10°C (18°F) Higher Than Controller Ambient	Constant 10°C (18°F) Lower Than Controller Ambient
1.15 to 1.25	1.0	0.9	1.05
1.0	0.9	0.8	0.95