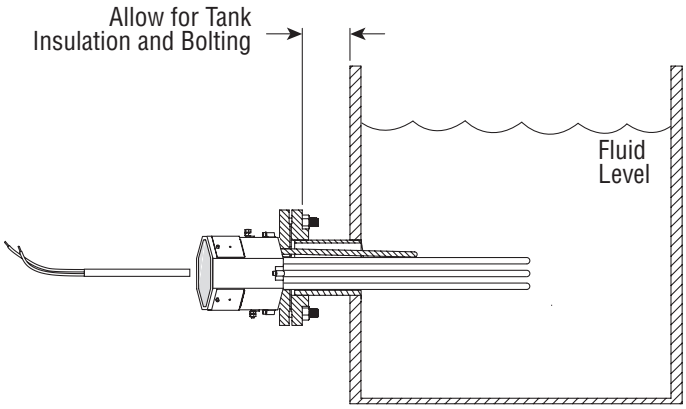
CHROMALOX

STFX
Small Tank Flange Heater

- 304 Stainless Steel Element Sheath
- Carbon Steel Flange Construction
- 3" to 12" 150# Flange Size
- Moisture Resistant Terminal Housing (NEMA 4/IP66)
- Third Party Certified
- 1 - 25 kW Unit Ratings
- 240 V, 480 V, or 600 V, Three Phase, Single Circuit
- 24" (610 mm) Immersion Lengths
- 5, 10, 20, or 40 w/in^2 (1, 1.6, 3.5 & 6.2 w/cm^2) Pipe Surface
- Standard Over-Temperature Protection - Type J Thermocouple
- ASME Design and Certi ication Available





Description

Chromalox STFX style units allow heating elements to be changed without draining the tank. This is ideal for smaller, critical system storage units that need to remain filled for continuous operation and storage.

Applications

STFX units provide replaceable-element design in a compact setting, while providing precise temperature control. Units comply with API-614 and can be used for such materials as lube oil, fire water storage, water solutions, asphalt, water/glycol, diesel, acidic solutions, ethanol, bio-diesel (B-100), glycerin, animal fats, vegetable oils, fuel oils or similar types of liquids.

Advantages

- **No Tank Draining Required** - Replaceable style heating elements can be inspected or changed without draining the tank. This reduces costs and production downtime.
- **Quick & Easy Installation** - A standard ANSI flange provides a straightforward mating connection with no special modifications required.
- **Stocked Replacement Elements** - Standardized heater cores allow for multiple heater element replaceability with a minimum number of parts.
- **Third-Party Certifications** - Terminal housings are CSA approved.
- **Easy Element Maintenance** - Replaceable-style elements can be easily changed by one person with no special tooling required.
- **Clean, Pollution-Free Electric Heat** - Unlike gas or steam heat, STFX units have no open flames, no additional plumbing connection, quiet operation, and better efficiencies. In addition, they can be precisely controlled and operation is simple.
- **Overtemperature Sensor** - Each unit is equipped with a type J thermocouple for overtemperature sensing on the pipe wall.

Options

- 304 or 316 Stainless Steel Flange
- 316 or INCOLOY 800 Element Sheath
- Alternate Voltage and kW Ratings
- Explosion/Moisture Resistant Terminal Housing
- Optional direct mounting of Chromalox controls
- Customized immersion lengths for unique sized tanks.
- Alternate materials for corrosive applications

STFX

Small Tank Flange Heater *(cont'd.)*

Steel Flange, 304 Stainless Steel applications

Model Specifications - 40 w/in² (6.2 w/cm²) Applications

Heater Model	Volts	kW	Immersion Length In. (mm)	Circuits	Phase	ANSI Flange Size	Number of Heater Tubes	Heater Part Number	Replacement Element Part Number
STFXS-01-002P-E4	480	2.0	24 (610)	1	1	3" - 150#	1	306608-001	306675-001
STFXS-03-006P-E4	480	6.0	24 (610)	1	3	3" - 150#	3	306608-002	306675-001
STFXS-06-012P-E4	480	12.0	24 (610)	1	3	4" - 150#	6	306608-003	306675-001
STFXS-09-018P-E4	480	18.0	24 (610)	1	3	5" - 150#	9	306608-004	306675-001
STFXS-12-024P-E4	480	24.0	24 (610)	1	3	6" - 150#	12	306608-005	306675-001
STFXS-01-001P6-E4	600	1.6	24 (610)	1	1	3" - 150#	1	306608-006	306675-002
STFXS-03-004P7-E4	600	4.7	24 (610)	1	3	3" - 150#	3	306608-007	306675-002
STFXS-06-009P4-E4	600	9.4	24 (610)	1	3	4" - 150#	6	306608-008	306675-002
STFXS-09-014P-E4	600	14.0	24 (610)	1	3	5" - 150#	9	306608-009	306675-002
STFXS-12-018P7-E4	600	18.7	24 (610)	1	3	6" - 150#	12	306608-010	306675-002

Model Specifications - 20 w/in² (3.1 w/cm²) Applications

Heater Model	Volts	kW	Immersion Length In. (mm)	Circuits	Phase	ANSI Flange Size	Number of Heater Tubes	Heater Part Number	Replacement Element Part Number
STFXS-03-003P-E4	480	3.0	24 (610)	1	3	3" - 150#	3	306608-011	306675-002
STFXS-06-006P-E4	480	6.0	24 (610)	1	3	4" - 150#	6	306608-012	306675-002
STFXS-09-009P-E4	480	9.0	24 (610)	1	3	5" - 150#	9	306608-013	306675-002
STFXS-12-012P-E4	480	12.0	24 (610)	1	3	6" - 150#	12	306608-014	306675-002
STFXS-24-024P-E4	480	24.0	24 (610)	1	3	8" - 150#	24	306608-015	306675-002
STFXS-03-003P2-E4	600	3.2	24 (610)	1	3	3" - 150#	3	306608-016	306675-001
STFXS-06-006P3-E4	600	6.3	24 (610)	1	3	4" - 150#	6	306608-017	306675-001
STFXS-09-009P4-E4	600	9.4	24 (610)	1	3	5" - 150#	9	306608-018	306675-001
STFXS-12-012P5-E4	600	12.5	24 (610)	1	3	6" - 150#	12	306608-019	306675-001
STFXS-24-025P-E4	600	25.0	24 (610)	1	3	8" - 150#	24	306608-020	306675-001

Application Recommended w/in²

Oil	w/in² (w/cm²)	Water
----------	40 (6.2)	Water or Water/Glycol Mix
Light Weight	20 (3.1)	Mildly Corrosive
Medium Weight	10 (1.6)	Severely Corrosive
Heavy Weight	5 (1)	----------

Note: To maximize heater life, the unit selection requires critical engineering judgement by the plant engineer in the selection of proper heater materials and watt density.

Power Control Assembly Pairings

Model Description	Part Number	Power Control Type
SPCA-C1-75E4X 480V3PH	484111-005	On/Off
SPCA-S1-75E4V 480V3PH	484111-006	Proportional

Process Sensor Kits

Model Description	PCN Number	Type
PSKS-J4SS50-0001	616024	Type J T/C
PSKS-RTD4SS200-0002	616016	3-wire RTD

STFX
Small Tank Flange Heater *(cont'd.)*

Steel Flange, 304 Stainless Steel applications

Model Specifications - 10 w/in² (1.6 w/cm²) Applications

Heater Model	Volts	kW	Immersion Length In. (mm)	Circuits	Phase	ANSI Flange Size	Number of Heater Tubes	Heater Part Number	Replacement Element Part Number
STFXS-03-001P5-E4	240	1.5	24 (610)	1	3	3" - 150#	3	306608-021	306675-001
STFXS-06-003P-E4	240	3.0	24 (610)	1	3	4" - 150#	6	306608-022	306675-001
STFXS-12-006P-E4	240	6.0	24 (610)	1	3	6" - 150#	12	306608-023	306675-001
STFXS-24-012P-E4	240	12.0	24 (610)	1	3	8" - 150#	24	306608-024	306675-001
STFXS-36-018P-E4	240	18.0	24 (610)	1	3	10" - 150#	36	306608-025	306675-001
STFXS-48-024P-E4	240	24.0	24 (610)	1	3	12" - 150#	48	306608-026	306675-001
STFXS-03-001P6-E4	600	1.6	24 (610)	1	3	3" - 150#	3	306608-027	306675-002
STFXS-06-003P2-E4	600	3.2	24 (610)	1	3	4" - 150#	6	306608-028	306675-002
STFXS-12-006P3-E4	600	6.3	24 (610)	1	3	6" - 150#	12	306608-029	306675-002
STFXS-24-012P5-E4	600	12.5	24 (610)	1	3	8" - 150#	24	306608-030	306675-002
STFXS-36-018P8-E4	600	18.8	24 (610)	1	3	10" - 150#	36	306608-031	306675-002
STFXS-48-025P1-E4	600	25.1	24 (610)	1	3	12" - 150#	48	306608-032	306675-002

Model Specifications - 5 w/in² (1 w/cm²) Applications

Heater Model	Volts	kW	Immersion Length In. (mm)	Circuits	Phase	ANSI Flange Size	Number of Heater Tubes	Heater Part Number	Replacement Element Part Number
STFXS-03-000P8-E4	240	0.75	24 (610)	1	3	3" - 150#	3	306608-033	306675-002
STFXS-06-001P5-E4	240	1.5	24 (610)	1	3	4" - 150#	6	306608-034	306675-002
STFXS-12-003P-E4	240	3.0	24 (610)	1	3	6" - 150#	12	306608-035	306675-002
STFXS-24-006P-E4	240	6.0	24 (610)	1	3	8" - 150#	24	306608-036	306675-002
STFXS-36-009P-E4	240	9.0	24 (610)	1	3	10" - 150#	36	306608-037	306675-002
STFXS-48-012P-E4	240	12.0	24 (610)	1	3	12" - 150#	48	306608-038	306675-002
STFXS-06-001P6-E4	600	1.6	24 (610)	1	3	4" - 150#	6	306608-039	306675-001
STFXS-12-003P2-E4	600	3.2	24 (610)	1	3	6" - 150#	12	306608-040	306675-001
STFXS-24-006P3-E4	600	6.3	24 (610)	1	3	8" - 150#	24	306608-041	306675-001
STFXS-36-009P4-E4	600	9.4	24 (610)	1	3	10" - 150#	36	306608-042	306675-001
STFXS-48-012P5-E4	600	12.5	24 (610)	1	3	12" - 150#	48	306608-043	306675-001

Application Recommended w/in² (w/cm²)

Oil	w/in² (w/cm²)	Water
----------	40 (6.2)	Water or Water/Glycol Mix
Light Weight	20 (3.1)	Mildly Corrosive
Medium Weight	10 (1.6)	Severely Corrosive
Heavy Weight	5 (1)	----------

Note: To maximize heater life, the unit selection requires critical engineering judgement by the plant engineer in the selection of proper heater materials and watt density.

Power Control Assembly Pairings

Model Description	Part Number	Power Control Type
SPCA-C1-75E4X 480V3PH	484111-005	On/Off
SPCA-S1-75E4V 480V3PH	484111-006	Proportional

Process Sensor Kits

Model Description	PCN Number	Type
PSKS-J4SS50-0001	616024	Type J T/C
PSKS-RTD4SS200-0002	616016	3-wire RTD

STFX
Small Tank Flange Heater *(cont'd.)*

Ordering Information

To Order— Complete model number using the matrix provided.

Model	Small Tank Heating Systems
STFX	Small Tank Flange Heater

Code	Thermowell Material
S	304 Stainless Steel
I	Incoloy 800
X	Other Material

Code	Flange Material
(Blank)	Carbon Steel
S	304 Stainless Steel
X	Other Material

Code	Number of Thermowells	Code	Number of Thermowells
01	One	05	Five
02	Two	06	Six
03	Three	07	Seven
04	Four	08	Eight

Code	Wattage
004P5	4.5 kW (use actual kilowatt in three digits)

Code	Terminal Housing Style
E4	Moisture Resistant
E2	Explosion / Moisture Resistant

Code	Non-Standard Feature
(Blank)	Catalog PCN item
XX	Custom Feature

Code	Voltage	Code	Voltage	Code	Voltage
208	208 V	240	240 V	380	380 V
415	415 V	480	480 V	600	600 V

Code	Number of circuits	Code	Number of circuits
1	One	3	Three
2	Two	4	Four

Code	Phase
1P	Single Phase
3P	Three Phase

Code	Kilowatts
4.5	kW

STFX	S	S	-03	-004P5	-E4		480V	1	-3P	4.5kW	Typical Model Number

Example of Final Model Description: STFXSS-03-004P5-E4 480V 1-3P 4.5kW

Note — Shaded sections of the model build table are not a finite list. Items such as Number of Tubes, Length, Wattage, and Voltage should be adjusted to match design.