

# ELECTRICALLY HEATED HIGH-PRESSURE CLEANING SYSTEMS







ES830K2472AS - 8 gpm @ 3000 psi with optional SRA surge relief assembly



ES543K472AS - 5.4 gpm @ 3000 psi with optional stainless steel wrap, cart and dual chemical system



ES420K448AS - 4 gpm @ 2000 psi with optional stainless steel wrap and heavy-duty lifting skid

MODEL	Flow GPM	Pressure PSIG	Heater Input	Motor H.P.	Total 208V	Amps 460V	-3 Phase 600V	Dimensions L" x W" x H"
ES411K424A	4	1100	24 kW	3	72.5	34.3	26.6	32/24/52
ES411K448A	4	1100	48 kW	3	134.8	64.4	49.7	32/24/52
ES411K472A	4	1100	72kW	3	209.9	94.5	72.4	32/24/52
ES420K424A	4	2000	24 kW	5	81.3	36.8	28.4	32/24/52
ES420K448A	4	2000	48 kW	5	139.6	66.9	51.8	32/24/52
ES420K472A	4	2000	72 kW	5	-	97	74.4	32/24/52
ES429K424A	4	2900	24 kW	7.5	89.2	39.9	31.3	32/24/52
ES429K448A	4	2900	48 kW	7.5	155.9	70	54.4	32/24/52
ES429K472A	4	2900	72 kW	7.5	-	100.2	76.9	32/24/52
ES440K448A	4	4000	48 kW	10	162.4	72.8	56.7	32/24/52
ES440K472A	4	4000	72 kW	10	-	102.9	79.9	32/24/52
ES450K448A	4	5000	48 kW	15	-	78.4	60.7	38/28/55 (1)
ES450K472A	4	5000	72 kW	15	-	108.6	83.9	38/28/55 (1)
ES550K448A	5	5000	48 kW	20	-	85.2	66.5	38/28/55 (1)
ES550K472A	5	5000	72 kW	20	-	115.4	89.8	38/28/55 (1)
ES543K448A	5.4	3000	48 kW	10	162.4	72.8	56.7	32/24/52
ES543K472A	5.4	3000	72 kW	10	-	102.9	79.9	32/24/52
ES562K448A	5.6	2000	48 kW	7.5	155.9	66.9	54.4	32/24/52
ES562K472A	5.6	2000	72 kW	7.5	-	97	77.6	32/24/52
ES612K448A	6	1200	48 kW	5	147.9	66.9	51.8	32/24/52
ES620K448A	6	2000	48 kW	7.5	155.9	70	54.4	32/24/52
ES620K472A	6	2000	72 kW	7.5	-	100.2	77.6	32/24/52
ES812K2448A*	8	1200	48 kW	7.5	155.9	70	54.4	53/48/40
ES812K2472A*	8	1200	72 kW	7.5	-	100.2	77.6	53/48/40
ES820K2448A*	8	2000	48 kW	10	162.4	72.8	56.7	53/48/40
ES820K2472A*	8	2000	72 kW	10	-	102.9	79.9	53/48/40
ES830K2448A*	8	3000	48 kW	15	173.4	78.4	60.7	53/48/40
ES830K2472A*	8	3000	72 kW	15	-	108.6	83.9	53/48/40
ES1030K2472A*	10	3000	72 kW	20	-	115.4	89.8	53/48/40
ES1030K2496A*	10	3000	96 kW	20	-	145.5	113.1	53/48/40
ES1030K24115A*	10	3000	115 kW	20	-	169.4	131.4	53/48/40

\* includes dual heat exchanger coils, 2 single lance gun assemblies/2 high-pressure wash hoses for multi-gun operation.

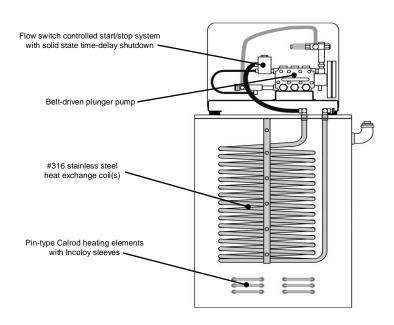
(1) pumping system top-mounted on heat exchanger (32" x 24" footprint)

# STANDARD EQUIPMENT:

- Belt-driven General ceramic plunger pump with adjustable pressure regulator, pilot-activated flow switch, liquid-filled pressure gauge and thermal protection (automatic shutdown)
- Powder coat painted heavy-gauge carbon steel base and frame assemblies
- Powder coat painted heater wraps and pump covers
- Automatic heat exchanger with #316 stainless steel HX coil(s), pin-type Calrod heating elements with Incoloy sleeves, adjustable temperature controller, low level switch with indicator light and NEMA 4X-rated control switches
- Dual or single lance/gun(s) with 50 ft. high-pressure wash hose(s) and high-pressure (upstream) or low-pressure (downstream) chemical injection

# CONSIDER THE ADVANTAGES OF A PSC ELECTRICALLY HEATED PRESSURE CLEANING SYSTEM...





### **FUNCTIONAL DESIGN:**

- Ease of use trigger gun controlled start/stop system with solid state time delay shutdown
- Instant hot water heat exchanger is thermally insulated allowing for almost 100% energy input/output and continuous, efficient operation
- Large 70 gallon (single coil models) & 120 gallon (dual coil models) heater storage tanks allows for continuous heat recovery even when trigger gun(s) not in use
- No open flame can be installed in virtually any location
- Inherent pump protection automatic high temperature shut down (thermo-probe) on pump bypass
- Compact 24" x 32" footprint with 52" height (single coil models)

# RELIABLE PERFORMANCE:

- Low-rpm, belt-driven, oil-bath plunger pump longer pump life when compared to direct drive systems
- Flow switch activated not affected by small system leaks (i.e. trigger gun)
- #316 stainless steel heat exchanger coil(s) designed for continuous-duty use
- No direct immersion of heating elements no scale buildup or element burnout

#### **VERSATILE:**

- 1000 psi to 5000 psi 2 gpm to 12 gpm
- Ideal centralized cleaning system
- Standard and explosion-proof models
- Full range of factory added options incl. portability carts, low and high-pressure surge arrestors, stainless steel frames and covers
- 208, 230, 440-480, 550-600 VAC/3 phase/60 hz and 220, 380-400 VAC/3 phase/50 hz models available
- 24, 48, 72, 96 and 115 kW input heat exchangers (custom-made models up to 230 kW)
- ASME B31.1, 2004 (Power Piping) code-compliant models available

#### **COST EFFECTIVE:**

- Low installation cost no venting required, can be installed virtually anywhere
- Low maintenance costs heat exchanger coil does not require decalcification, only periodic pump oil changes required
- Low operating costs compares favorably with fuel-fired and gas-fired machines and requires less kW input than direct-immersion type electrically heated models

# EASÉ OF MAINTÉNANCE:

- Pump/motor/controls/coil(s) easily accessible
- No water/soap scale buildup skin temperature of heat exchanger coil never exceeds 190°F

#### SAFETY:

- Vented-to-atmosphere heat exchanger design
- Low heat exchanger solution cut-off switch with indicator light
- Adjustable temperature controller
- CSA approved

## **SUPPORT:**

- Special application-designed systems
- Backed by qualified and responsive sales and technical personnel



