Issued Jan. 2020 • Index No. IN/14.0

Heating System

Induction **SSSS**

ProHeat 35 Air-Cooled Induction System

ApplicationsProcess pipingRefineryPetrochemicalPower pipingPressure vesselsStructuralShipbuilding

Maximum Preheat Temperature 400°F (204°C)

Input Power 460–575 V, 3-phase, 60 Hz 400–460 V, 3-phase, 50/60 Hz

Input Amperes at Rated Output 400 V: 60 amps 460 V: 50 amps 575 V: 40 amps

Rated Output

35 kW at 100% duty cycle

Power Source Dimensions

H: 27.5 in. (699 mm) W: 21.75 in. (552 mm) D: 36.75 in. (933 mm)

Power Source Weight

Net: 227 lb. (103 kg) Ship: 265 lb. (120 kg)

Powering a heating revolution – for preheat applications up to 400 degrees Fahrenheit (204°C).

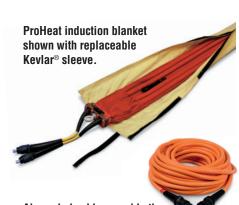
The ProHeat 35 air-cooled induction heating system is specifically designed for preheating applications up to 400 degrees Fahrenheit (204°C). Air-cooled blankets are available for pipe diameters from 8–60 inches (20–152 cm) or in case of plate, available lengths are 40–197 inches (1–5 m). Air-cooled cables are available in lengths of 30 foot (9.1 m), 50 foot (15.2 m) or 80 foot (24.4 m) for flexible configurations.

The blankets easily conform to circular and flat parts and install in a matter of seconds. Manufactured from durable high-temperature materials, flexible induction blankets are designed to withstand the tough conditions in both industrial and construction applications.

Designed with flexibility and efficiency in mind, the air-cooled cables can be wrapped into coils of various shapes and sizes to fit almost any induction preheating application, without the need for cooler and coolant. For temperatures up to 392 degrees Fahrenheit (200°C).



ProHeat 35 power source shown with optional running gear (195436).



Air-cooled cables provide the same flexibility as liquid-cooled cables for preheating.

Improved working environment is created during welding. Welders are not exposed to open flame, explosive gases and hot elements associated with fuel gas heating and resistance heating.

Easy setup with flexibility to fit a variety of pipe diameters and plate lengths.

Uniform heating is maintained along and through the heat zone by using induction heat within the material. The surface of the part is not marred by localized conducted heat at higher than specified temperatures.

Time-to-temperature is faster than conventional processes due to the method of applying heat, reducing cycle time.





Miller Electric Mfg. LLC

An ITW Welding Company 1635 West Spencer Street P.O. Box 1079 Appleton, WI 54912-1079 USA

Equipment Sales US and Canada

Phone: 866-931-9730 FAX: 800-637-2315 International Phone: 920-735-4554 International FAX: 920-735-4125





ProHeat[®] 35 Air-Cooled System

ProHeat 35 Power Source 907689 460-575 V, CSA 907690 400-460 V, CE

The ProHeat 35 induction power source is equipped with a built-in temperature controller allowing for manual or temperature-based programming using up to four control thermocouples. At more than 90 percent efficiency, the ProHeat 35 power source transfers more energy to the part, reducing operating costs over different heating methods. One ProHeat 35 power source has two outputs and can run one, two (parallel) or four (series/parallel) blankets at a time.

Note: Primary input cable not included.



Running Gear 195436

Running gear adds to the portability of the system. The four 5-inch swivel casters with brakes mount to the bottom of the power source.

Preheat Insulation with Cable Harness 301334

Air-cooled heating cable coils of various sizes can be attached directly to this preheat insulation. Once a coil is set up it can easily be moved from part to part reducing setup times. The insulation is 10-foot (3 m) long and can be cut to length to fit your application.

Note: Heating cable not included.

Air-Cooled Cable

301453030 30 ft. (9.1 m) **301453050** 50 ft. (15.2 m) **301453080** 80 ft. (24.4 m) Air-cooled cables may be the right choice when the maximum preheat temperature is 400 degrees Fahrenheit (204°C) and the part is an irregular, non-standard shape that needs flexibility of wrapping the part. Use preheat

insulation for temperatures over 392 degrees Fahrenheit (200°C). See ordering information on the back page for preheat insulation sizes. Output Extension Cable 195404 25 ft. (7.6 m) 195405 50 ft. (15.2 m) 300362 75 ft. (22.9 m) Provides interconnection between the power source and flexible induction blanket or air-cooled cable(s). The power



source connection identifies the type of heating device to the power source controller. This cable identification system prevents over duty cycling of the heating tool.





ProHeat[™] 35 Air-Cooled Induction System (Continued)



Thermocouple Extension 200201

A shielded, 25-foot (7.6 m) thermocouple extension for connecting between the contact thermocouple sensor and the ProHeat[™] 35 power source.



Induction Blanket

The flexible, lightweight induction heating blankets come in a variety of sizes and are capable of preheat temperatures up to 400 degrees Fahrenheit (204°C). The blankets easily conform to circular and flat parts and install in a matter of seconds. Manufactured from durable high-temperature materials, flexible induction blankets are designed to withstand the tough conditions in both industrial and construction applications. See ordering information on the back page for available sizes.

Additional Accessories



Contact Thermocouple Sensor (Probe) 200202 Contact thermocouple sensor installed between the

induction blanket and the part being heated. The temperature probe provides temperature feedback to the power source. For preheat only, 500 degrees Fahrenheit (260°C) maximum.



Preheat Cable Cover 204611 30 ft. (9.1 m) 204614 50 ft. (15.2 m) 204620 80 ft. (24.4 m) Used in preheat applications to protect the heating cable from slag and molten metal created during welding. The 1/2-inch thick preheat insulation must be used with the preheat cable covers.



Replacement Kevlar® Sleeve

Each blanket is supplied with one replaceable Kevlar sleeve which provides added protection against abrasion, cuts and tears, extending blanket life. Replacement sleeves are available for blanket sizes based on the diameter of the pipe. See ordering information on the back page for available sizes.



Series Cable Adapter 195437

Used in series/parallel arrangement to power four blankets/air-cooled cables to create extra heating area. The series/parallel arrangement requires four equally sized blankets/air-cooled cables, two output extension cables and two series cable adapters.



Remote Contactor Control 043932 Remotely start and stop the heating process with this wired rocker switch remote. Includes a 25-foot (7.6 m) cable.



RHC-14 Remote Hand Control 242211020 20 ft. (6 m) 242211100 100 ft. (30.5 m) Remotely adjust the heat output of the system in remote mode as well as start and stop the heating process.

Specifications (Subject to change without notice.)

Input Power	Ambient Tempera Storage	ature Range Usage	Rated Output	Input Amperes at Rated Output	KVA/KW at Rated Output	Dimensions	Weight
460–575 V, 3-phase, 60 Hz 🔊	-40 to 131°F (-40 to 55°C)	4 to 131°F (-15 to 55°C)	35 kW at 100% duty cycle	50 A, 460 V 40 A, 575 V	39/37	H: 27.5 in. (699 mm) W: 21.75 in. (552 mm)	Net: 227 lb. (103 kg)
400–460 V, 3-phase, 50/60 Hz, CE				60 A, 400 V 50 A, 460 V		D: 36.75 in. (933 mm)	Ship: 265 lb. (120 kg)

() Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

(C) Manufactured and certified in accordance with IEC-60974-1, -10.



Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
ProHeat™ 35	907689 907690	460–575 V, 3-phase, 60 Hz, 35 kW power source, CSA 400–460 V, 3-phase, 50/60 Hz, 35 kW power source, CE		
Running Gear	195436	Attaches to bottom of power source		
Induction Blankets	Blanket Replacement w/Sleeve Sleeve 300080 195337 300079 195338 300078 194887 300075 194887 300075 194887 300074 198666 300072 198666 300071 198666 300071 198666 300070 198666 300069 194812 300066 194812 300065 194705 300066 194812 300065 194705 300064 198670 300065 194705 300061 198670 300062 198670 300060 261481 224584 261481 301088 261480 301088 261480	For 8.625 in. (22 cm) pipe, 13.1×40 in. $(33 \text{ cm} \times 102 \text{ cm})$ For 10.75 in. (27 cm) pipe, 11.3×44 in. $(29 \text{ cm} \times 112 \text{ cm})$ For 12 in. (31 cm) pipe, 47×10.1 in. $(119 \text{ cm} \times 26 \text{ cm})$ For 14 in. (36 cm) pipe, 53×10.1 in. $(135 \text{ cm} \times 26 \text{ cm})$ For 16 in. (41 cm) pipe, 60×10.1 in. $(152 \text{ cm} \times 26 \text{ cm})$ For 16 in. (46 cm) pipe, 66×9.0 in. $(168 \text{ cm} \times 23 \text{ cm})$ For 20 in. (51 cm) pipe, 72×9.0 in. $(183 \text{ cm} \times 23 \text{ cm})$ For 22 in. (56 cm) pipe, 78×9.0 in. $(198 \text{ cm} \times 23 \text{ cm})$ For 24 in. (61 cm) pipe, 85×9.0 in. $(216 \text{ cm} \times 23 \text{ cm})$ For 26 in. (66 cm) pipe, 91×9.0 in. $(216 \text{ cm} \times 23 \text{ cm})$ For 28 in. (71 cm) pipe, 97×9.0 in. $(246 \text{ cm} \times 23 \text{ cm})$ For 30 in. (76 cm) pipe, 104×9.0 in. $(246 \text{ cm} \times 23 \text{ cm})$ For 32 in (81 cm) pipe, 110×9.0 in. $(227 \text{ cm} \times 23 \text{ cm})$ For 32 in (81 cm) pipe, 110×9.0 in. $(295 \text{ cm} \times 23 \text{ cm})$ For 34 in (86 cm) pipe, 122×7.5 in. $(310 \text{ cm} \times 19 \text{ cm})$ For 38 in (97 cm) pipe, 129×7.5 in. $(328 \text{ cm} \times 19 \text{ cm})$ For 40 in (102 cm) pipe, 154×7.5 in. $(391 \text{ cm} \times 19 \text{ cm})$ For 44 in (117 cm) pipe, 154×7.5 in. $(430 \text{ cm} \times 19 \text{ cm})$ For 52 in (132 cm) pipe, 173×7.5 in. $(470 \text{ cm} \times 19 \text{ cm})$ For 52 in (132 cm) pipe, 160×7.5 in. $(470 \text{ cm} \times 19 \text{ cm})$ For 56 in (142 cm) pipe, 185×7.5 in. $(470 \text{ cm} \times 11 \text{ cm})$ Narrow, for 48 in (122 cm) pipe, 160×4.5 in. $(470 \text{ cm} \times 11 \text{ cm})$		
Air-Cooled Cables	301453030 301453050 301453080	30 ft. (9.1 m) 50 ft. (15.2 m) 80 ft. (24.4 m)		
Preheat Cable Cover204611(recommended for use on most204614preheat applications)204620		30 ft. (9.1 m) 50 ft. (15.2 m) 80 ft. (24.4 m)		
Preheat Insulation 204669 (for air-cooled cable use) 195376 211474 301334		1/2 x 6 x 120 in. (1.3 x 15 x 305 cm) 1/2 x 6 x 240 in. (1.3 x 15 x 305 cm) 1/2 x 12 x 120 in. (1.3 x 31 x 305 cm) Preheat insulation with cable harness, 1/2 x 16 x 120 in. (1.3 x 41 x 305 cm)		
Output Extension Cables 195404 195405 300362		25 ft. (7.6 m) 50 ft. (15.2 m) 75 ft. (22.9 m)		
Series Cable Adapter 195437		18 in. (46 cm) adapter for connecting two blankets in series configuration		1
Contact Thermocouple Sensor (Probe) 200202		Contact thermocouple sensor. 500°F (260°C) max		-
Thermocouple Extension 194968		Cable, ext, 1 TC type K, 25 ft. (7.6 m) armored		-
Remote Contactor Control 043932		25 ft. (7.6 m) wired remote on/off for power source		1
RHC-14 Remote Hand Control 242211020 242211100 242211100		20 ft. (6 m) wired remote for heat and on/off for power source 100 ft. (30.5 m) wired remote for heat and on/off for power source		

Date:

Distributed by:

Total Quoted Price:

