

## LPG Series

# Low Profile Unit Cooler

## Hot Gas Defrost



The Kramer LPG unit cooler is the ideal solution for problem areas with limited head room. These units are ceiling mounted; thereby saving space for product storage.

With a Low Profile draw-thru design, uniform air distribution is achieved.

These units can operate in the temperature range of -20°F to +35°F. They are ideally suited for low temperature frozen food storage and medium temperature holding rooms.

### Features and Options:

- Low Unit Height
- Corrosion resistant Aluminum cabinet
- Coils constructed of Copper tubes and Aluminum fins
- Dependable ratings based on laboratory tests
- Interchangeable fans and motors on all models
- All motors are permanently lubricated with overload protection
- Available in 4 or 6 FPI
- Sloped drain pan built-in for positive condensate drainage
- Factory wired for quick field installation
- Available for Thermobank II or reverse cycle Hot Gas Def. systems
- Hot Gas heated drain pan
- Electrical knockouts on front, back and top
- Hinged end panel design for easy installation of TXV and solenoid valves
- NSF approved
- UL and cUL listed
- Available with PSC or EC motors



Capacity Data

	Model Number	EVAPORATOR TEMPERATURE - °F						
		BTU/HR @ 10° TD <sup>1</sup>						
		+25°	+20°	+10°	0°	-10°	-20°	-30°
6 FPI	LPG- 35*	4200	4100	4000	3900	3700	3500	3300
	LPG- 41*	4800	4700	4600	4500	4300	4100	3900
	LPG- 46*	5300	5200	5100	5000	4800	4600	4400
	LPG- 63*	7400	7200	7000	6800	6600	6300	5900
	LPG- 71*	8200	8000	7800	7600	7400	7100	6700
	LPG- 92*	10600	10400	10200	9900	9600	9200	8800
	LPG- 120*	13800	13500	13200	12900	12500	12000	11400
	LPG- 138*	15900	15600	15300	14900	14400	13800	13100
	LPG- 162*	18700	18300	17900	17500	16900	16200	15400
	LPG- 184*	21200	20800	20400	19900	19200	18400	17500
	LPG- 220*	25300	25000	24600	23900	23000	22000	21000
	LPG- 240*	27700	27200	26700	25900	25000	24000	22800
LPG- 265*	30500	30000	29500	28600	27600	26500	25200	
4 FPI	LPG- 38*	4500	4400	4300	4200	4000	3800	3600
	LPG- 70*	8100	7900	7700	7500	7300	7000	6600
	LPG- 86*	9800	9600	9400	9200	9000	8600	8100
	LPG- 106*	12100	11900	11700	11400	11100	10600	10100
	LPG- 142*	16500	16100	15700	15300	14800	14200	13500
	LPG- 182*	21000	20600	20200	19700	19000	18200	17300
	LPG- 214*	24600	24100	23600	23100	22300	21400	20300

Performance Data

	Model Number	CFM (3)	Air Throw (ft.) (2) (3)	Motor Qty.	Total Fan Motor Amps (4)			
					SP		PSC*	EC*
					230V	460V	230V	230V
6 FPI	LPG- 35*	750	12	1	1.00	0.54	0.5	0.45
	LPG- 41*	720	12	1	1.00	0.54	0.5	0.45
	LPG- 46*	700	12	1	1.00	0.54	0.5	0.45
	LPG- 63*	1380	15	2	2.00	1.08	1.0	0.90
	LPG- 71*	1350	15	2	2.00	1.08	1.0	0.90
	LPG- 92*	1390	15	2	2.00	1.08	1.0	0.90
	LPG- 120*	2130	20	3	3.00	1.62	1.5	1.35
	LPG- 138*	2070	20	3	3.00	1.62	1.5	1.35
	LPG- 162*	2740	25	4	4.00	2.16	2.0	1.80
	LPG- 184*	2650	25	4	4.00	2.16	2.0	1.80
	LPG- 220*	3410	30	5	5.00	2.70	2.5	2.25
	LPG- 240*	4110	35	6	6.00	3.24	3.0	2.70
LPG- 265*	3980	35	6	6.00	3.24	3.0	2.70	
4 FPI	LPG- 38*	750	12	1	1.00	0.54	0.5	0.45
	LPG- 70*	1480	15	2	2.00	1.08	1.0	0.90
	LPG- 86*	1440	15	2	2.00	1.08	1.0	0.90
	LPG- 106*	2220	20	3	3.00	1.62	1.5	1.35
	LPG- 142*	3050	25	4	4.00	2.16	2.0	1.80
	LPG- 182*	3550	30	5	5.00	2.70	2.5	2.25
	LPG- 214*	4290	35	6	6.00	3.24	3.0	2.70

1. Standard units based on R404A.  
2. Unrestricted air flow.

3. Optional high throw fan guards available.  
4. All motors are wired for single phase power.

\*PSC = Permanent Split Capacitor    EC = Electronically Commutated Motor    SP = Shaded Pole

Physical Data

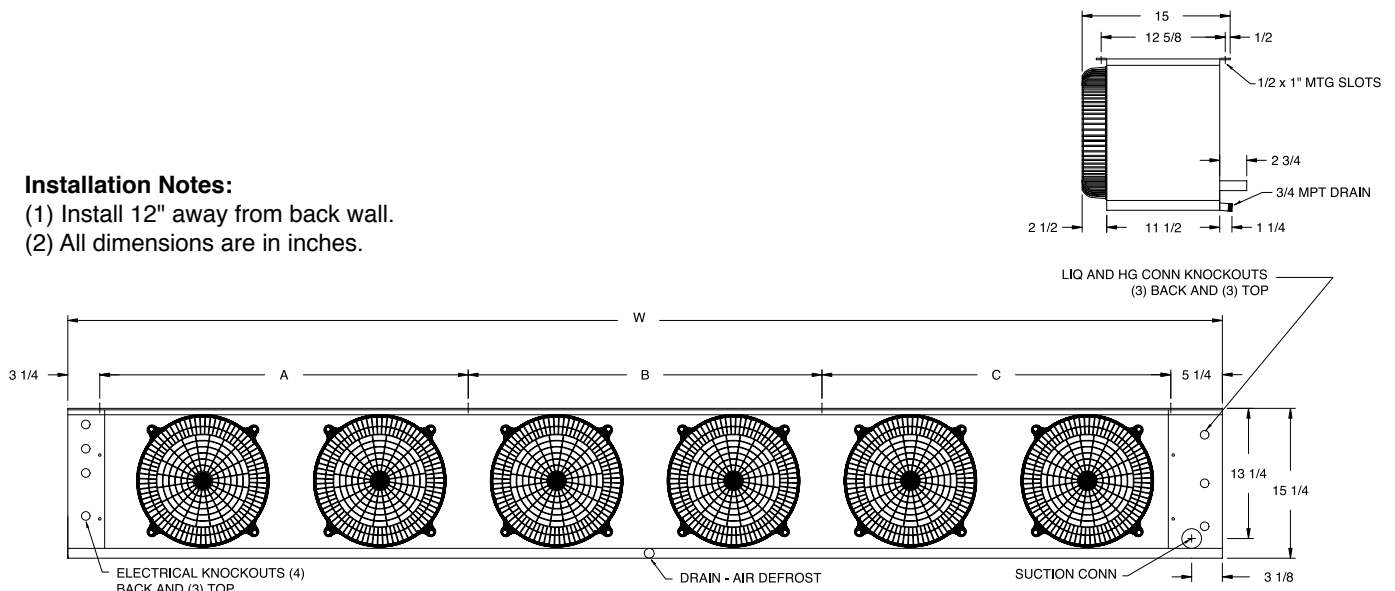
	Model	Connections (in) <sup>1</sup>				No. of Hangers	Dimensions (Inches)				Ref. Charge (lbs.) <sup>1</sup>	Ship Wt. (lbs.)
		Liquid O.D.	Suction O.D.	TXV Type	Drain MPT		A	B	C	W		
6 FPI	LPG- 35*	1/2 ODS	5/8 ODS	EXT	3/4	2	19	—	—	27½	0.8	41
	LPG- 41*	1/2	5/8	EXT	3/4	2	19	—	—	27½	1.2	44
	LPG- 46*	1/2	5/8	EXT	3/4	2	19	—	—	27½	1.6	47
	LPG- 63*	1/2	7/8	EXT	3/4	2	33	—	—	41½	1.3	61
	LPG- 71*	1/2	7/8	EXT	3/4	2	33	—	—	41½	2.0	67
	LPG- 92*	1/2	7/8	EXT	3/4	2	37	—	—	45½	3.0	74
	LPG- 120*	1/2	7/8	EXT	3/4	2	55	—	—	63½	3.2	105
	LPG- 138*	1/2	1-1/8	EXT	3/4	2	55	—	—	63½	4.3	115
	LPG- 162*	1/2	1-1/8	EXT	3/4	3	36½	36½	—	81½	4.3	140
	LPG- 184*	1/2	1-1/8	EXT	3/4	3	36½	36½	—	81½	5.7	155
	LPG- 220*	1/2	1-1/8	EXT	3/4	3	54½	36½	—	99½	5.3	225
	LPG- 240*	1/2	1-1/8	EXT	3/4	4	36½	36	36½	117½	6.3	250
	LPG- 265*	1/2	1-1/8	EXT	3/4	4	36½	36	36½	117½	8.4	270

4 FPI	LPG- 38*	1/2 ODS	5/8 ODS	EXT	3/4	2	19	—	—	27½	1.2	42
	LPG- 70*	1/2	7/8	EXT	3/4	2	37	—	—	45½	2.2	67
	LPG- 86*	1/2	7/8	EXT	3/4	2	37	—	—	45½	3.0	72
	LPG- 106*	1/2	1-1/8	EXT	3/4	2	55	—	—	63½	3.2	100
	LPG- 142*	1/2	1-1/8	EXT	3/4	3	36½	36½	—	81½	4.3	135
	LPG- 182*	1/2	1-1/8	EXT	3/4	3	54½	36½	—	99½	5.3	220
	LPG- 214*	1/2	1-1/8	EXT	3/4	4	36½	36	36½	117½	6.3	245

\* For Thermobank II applications, add a "T" to the model number suffix.  
 For reverse cycle applications add an "R" to the model number suffix.  
 1. Based on R-404A

**Installation Notes:**

- (1) Install 12" away from back wall.
- (2) All dimensions are in inches.



***KRAMER's EC Motors bring the benefits inherent to unit bearing motor design to the refrigeration Unit Cooler market.***

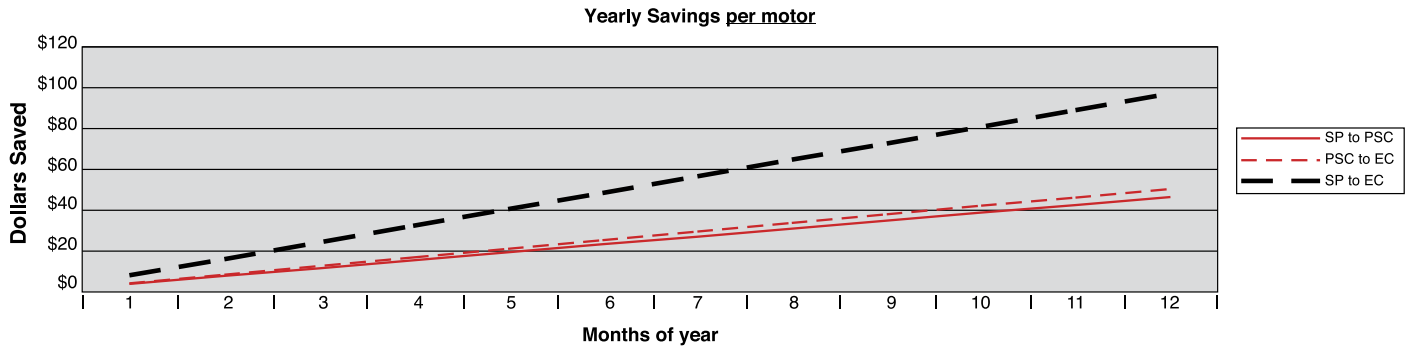
- Large oil reservoir
- Totally enclosed construction
- **Journal bearing machined into the cast iron endbell**
- Spiral grooved shaft pump **guarantees** positive oil circulation
- **Threaded shaft uses hubless fan blade.**

Achieved by Changing to More Efficient Unit Cooler Motors  
(Based on Energy Cost of \$0.10 per kWh)

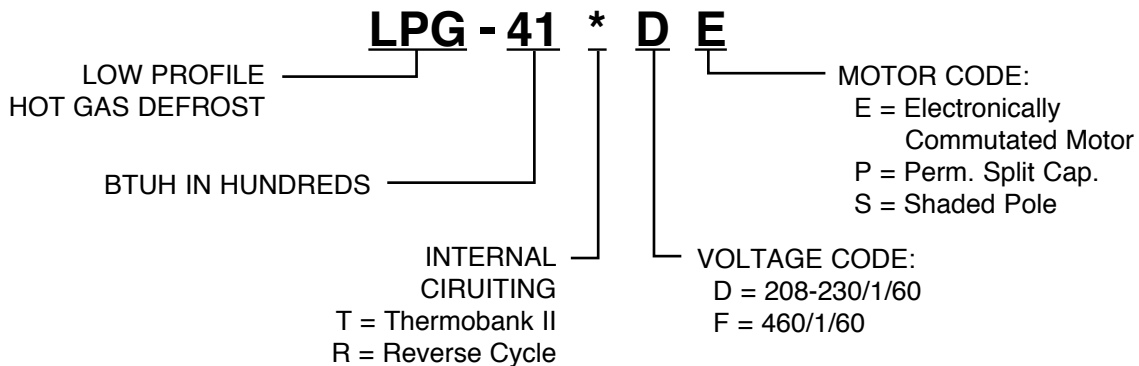
Energy Savings per Motor

Motor Change	Std Motor Power Watts/Mtr	Change to Motor Power Watts/Mtr	Reduced Power Watts/Mtr	Run Time Hrs/Day	Motor Energy Savings kWh/Yr	Motor Energy Savings \$/Yr	Reduced Box Load MBTU/Yr	Cond. Unit Energy Savings \$/Yr	Yearly Saving \$ Per MTR	Pay back in Yrs
SP to PSC	120	85	35	22	281	28	959	18	47	0.6
PSC to EC	85	47	38	22	305	31	1041	20	51	2.0
<b>SP to EC</b>	<b>120</b>	<b>47</b>	<b>73</b>	<b>22</b>	<b>586</b>	<b>59</b>	<b>2000</b>	<b>38</b>	<b>97</b>	<b>1.3</b>

SP = 1/20 HP Shaded pole motor  
PSC = 1/20 HP PSC motor  
EC = 50 Watt Electronically Commutated motor



Nomenclature:



KM-LPG-0412A