



DOE 2020 WALK-IN COOLER AND FREEZER REGULATIONS ARE HERE!

Krack is ready! Are you?

The United States Department of Energy (DOE) begins regulating condensing units applied to Walk-In Coolers and Freezers (WICFs) that are 3,000 square feet in area or less. These energy regulations require energy reductions¹ of 20-40 percent from previous designs. Medium temperature condensing units manufactured after January 1st, 2020 and low temperature condensing units manufactured after July 10th, 2020 will need to be labeled for this application.

High Efficiency (HE) H-Series Condensing Units are designed and tested to provide an Annual Walk-In Energy Factor (AWEF) required to label units for WICF applications.

The minimum AWEF ratings vary for coolers ranging from 32°F to 55°F and freezers below 32°F by condensing unit location (indoor or outdoor). Refrigerated spaces (55°F or less) and 3,000 square feet or less regardless of application are in scope for the new regulation which covers air cooled condensing units. Out of scope for this regulation are water-cooled, remote condensing, satellite units or condensing units designed to serve more than one refrigeration load. There are no restrictions on using the more efficient units for non-regulated applications like refrigerated display cases or larger WICFs.



Krack has made substantial investments in design and testing to ensure a broad range of condensing units are available to provide application solutions for your WICF needs. Krack's exceptional sales, application, and design teams are ready to answer any questions and assist in selection of units for the new regulation.



Learn more about the High Efficiency H-Series product line at www.krack.com.



Shown: High Efficiency H-Series Condensing Unit

¹ Julie Havenar (Jul 31, 2019). *Contracting Business*; Retrieved from <https://www.contractingbusiness.com/refrigeration/doe-compliance-day-approaches-walk-coolers-and-freezers>

PRODUCT SOLUTIONS FOR JAN. 1, 2020 REGULATORY CHANGES

Krack provides a broad portfolio of High Efficiency H-Series condensing unit solutions that meet and exceed minimum AWEF requirements for WICF applications.

FEATURES

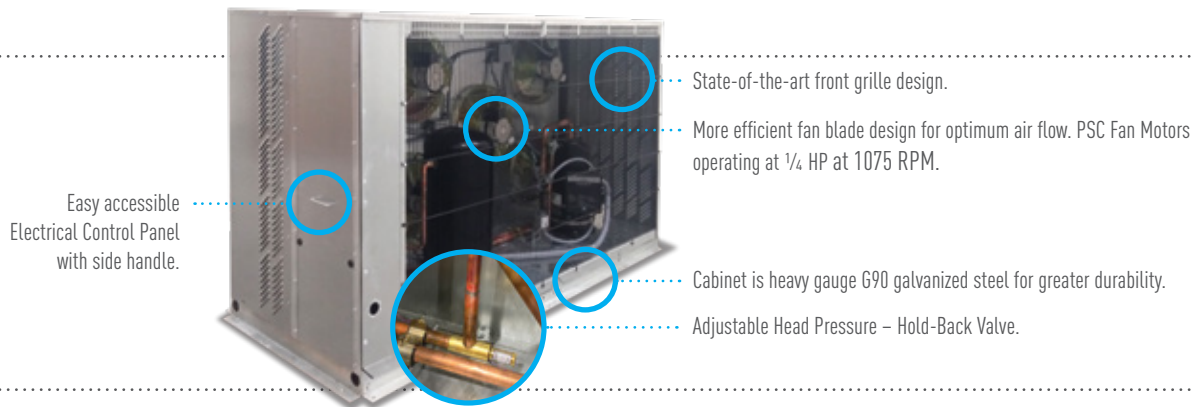
- Five different compressor options including Scroll and reciprocating from Copeland and Bitzer.
- Condensing units equipped with ¼ hp PSC fan motors operating at 1075 RPM.
- New front grille design that reduces static air pressure relative to legacy H-Series units.
- Refrigerants available* are R-404A, R-507A, R-407A, R-407F, R-448A, and R-449A with data plates showing all refrigerants that exceed DOE 2020 requirements.

* Krack products meet all National (including Canada) and State refrigerant regulations. Some refrigerants are not permissible in certain states and Canada.

- Voltages available are 208/1/60, 208/3/60, 460/3/60, and 575/3/60 for Canadian applications and are limited only by compressor availability.

BENEFITS

- Over 900 different configurations that meet the new DOE 2020 AWEF ratings that cover low and medium temperature units for indoor and outdoor applications.
** Note: Not all models shown in table below.*
- Condenser fan blade is a more efficient design with a deeper pitch to maximize air flow across the condenser.
- Electrical panel on outdoor units moved to the side to provide better air flow and access for service.
- Outdoor models come standard with an adjustable head pressure control to allow optimization by refrigerant and application.
- Outdoor models with multiple condenser fans include ambient temperature control to cycle off half the fans below 40°F.



Number of Standard DOE Compliant **MEDIUM TEMP** Unit Solutions (-D Series)

Compressor Type	Refrigerant R-404A		Refrigerant R-507A		Refrigerant R-407A		Refrigerant R-407F		Refrigerant R-448A		Refrigerant R-449A		TOTAL	
	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Indoor
Copeland Scroll	11	12	11	12	10	13	10	12	10	13	10	12	62	74
Copeland Semi-Hermetic	2	0	0	0	2	0	0	0	0	0	0	0	4	0
Copeland Discus	5	7	5	7	5	8	5	8	5	8	5	8	30	46
Bitzer Ecoline, Motor 2	14	12	11	14	14	16	14	16	13	15	13	15	79	88
Bitzer Ecoline, Motor 1	12	10	12	11	12	13	12	12	12	13	12	13	72	72
TOTAL	44	41	39	44	43	50	41	48	40	49	40	48	247	280

Number of Standard DOE Compliant **LOW TEMP** Unit Solutions (-D Series)

Compressor Type	Refrigerant R-404A		Refrigerant R-507A		Refrigerant R-407A		Refrigerant R-407F		Refrigerant R-448A		Refrigerant R-449A		TOTAL	
	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Indoor
Copeland Scroll	9	11	9	11	8	3	9	4	9	6	9	6	53	41
Copeland Semi-Hermetic	6	4	0	0	0	0	4	3	2	0	2	0	14	7
Copeland Discus	8	8	8	8	7	8	8	9	6	7	7	8	44	48
Bitzer Ecoline, Motor 2	17	17	17	17	17	17	17	17	16	17	16	17	100	102
TOTAL	40	40	34	36	32	28	38	33	33	30	34	31	211	198



Krack, a Hussmann Corporation brand

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