NO: MB2018CC-2 DATE: 12/20/2017

TO: Refrigeration Original Equipment Manufacturers & End Users

FROM: Copeland[™] Marketing – Refrigeration

SUBJECT: Launch of Copeland M-Line R-290 Condensing Units

EFFECTIVE DATE: Immediate

The Refrigeration Industry is facing unprecedented times to meet the Department of Energy (DOE) and Environmental Protection Agency (EPA) regulations. In an effort to help our customers meet these regulations, Emerson is pleased to announce the launch of R-290 ready condensing units in our Copeland M-Line condensing unit platform. The launch of these condensing units will enable our OEMs to responsd to EPA's approval of R-290 as a natural refrigerant substitute for the existing hydrofluorocarbon (HFC) refrigerants for various refrigeration applications. Also, these units will help answer the DOE's call for more efficient refrigeration systems. DOE has mandated for most reach in systems, a 30-50% reduction in engery consumption which began in March' 2017. Emerson's R-290 M-Line condensing units are designed and optimized for delivering the best in class efficiency in the industry.

This new solution offers optimal performance in the low and medium temperature refrigeration applications while also taking into consideration capacity equivalance and footprint match to the legacy HFC refrigerant M-Line units. These units leverages the recently launched high efficiency Hermetic R-290 compressor platforms. All the units are designed to be used withing the 150gm charge limit as allowed by EPA and UL. Units are available in standard steel base option as well as copevap base option for better condensate management.

Lead time and BOM guidelines are provided in Table 1 and 2 respectively. Table 3 provides the list of condensing unit models and performance data at rating conditions. The entire product performance, electrical, and mechanical information can be accessed online at EmersonClimate.com. Log in or register for Online Product Information (OPI).

For further details on the applications, offering, features and other details, please contact your respective Sales Manager or Application Engineer.

For more information on regulations see the DOE and EPA sites:

- US DOE Site
- US EPA Site

Additional Resources:

Emerson E360 Platform

Table 1: Lead Time Guidelines

	First New Order (Without Forecast)	All Subsequent Orders (With Forecast)
Condensing Units	12 – 16 weeks	Standard Lead Time

Table 2: BOM Guidelines

SE Code	Туре	Description	
-173	Standard	With End Cover, Filter Dryer, Fan Guard, Power Cable	
-Other	Customer Special	Custom Unit thru IPPR	



Table 3: Model Line Up @ Standard ARI Low Temp (-10F Evap. 90F Amb.) and Medium Temp (20F Evap. 90 Amb.) Rating Condition

Sr. No.	Unit Model	LT Btu/hr	LT EER	MT Btu/hr	MT EER
1	MUJL-0036-IAA-173	1,550			
2	MUJM-0019-IAA-173			1,660	5.2
3	MUJM-0022-IAA-173			1,870	5.1
4	MUJM-0028-IAA-173			2,440	4.9
5	MUJL-H040-IAA-173	1,690	4.4		
6	MUJM-H022-IAA-173			1,800	5.9
7	MUJM-H024-IAA-173			2,050	5.9
8	MUJM-H032-IAA-173			2,750	5.9
9	MUJM-H039-IAA-173			3,500	5
10	MUZL-0030-IAA-173	1,410	4.5	2,680	7
11	MUZL-H030-IAA-173	1,420	4.6	2,730	7.2
12	MUJL-0028-IAA-173	1,280	4.2	2,310	5.7
13	MUJL-H029-IAA-173	1,370	4.6	2,580	6.9
14	MUZL-H044-IAA-173	1,760	4.4		
15	MUZM-H024-IAA-173			1,880	5.9
16	MUZM-H027-IAA-173			2,140	6
17	MUZM-H036-IAA-173			2,910	6.3
18	MUZM-H047-IAA-173			3,770	5.4
19	MUGL-H045-IAA-173	1,790	4		
20	MUGM-H024-IAA-173	,		1,920	5.3
21	MUGM-H028-IAA-173			2,200	5.4
22	MUGM-H038-IAA-173			3,010	5.9
23	MUGM-H049-IAA-173			3,940	5.4
24	MUGL-H030-IAA-173	1,450	4.1	2,820	6.7
25	MUZL-0066-IAV-173	2,530	3.8	,	
26	MUZL-0077-IAV-173	2,940	3.9		
27	MUZL-0044-IAA-173	1,730	4.3		
28	MUZM-0023-IAA-173			1,860	5.8
29	MUZM-0026-IAA-173			2,110	5.8
30	MUZM-0036-IAA-173			2,860	6.1
31	MUZM-0046-IAA-173				5.2
32	MUGL-H070-IAV-173	2,690	3.8		
33	MUGL-H082-IAV-173	3,150	4		
34	MUZL-H067-IAV-173	2,580	3.9		
35	MUZL-H078-IAV-173	3,010	4		
36	MUZL-H078-CAA-173	3,130	4.3		
37	MUZL-H082-CAA-173	3,300	4.2		
38	MUZP-H051-CAA-173	.73 2,060 4.3		4,070	6.5
39	MUZP-H061-CAA-173	2,340	4.4	4,840	6.3
40	MUZP-H068-CAA-173	3,110	4.8	5,420	6
41	MUZP-H074-CAV-173	3,240	4.4	5,950	5.7
42	MUZL-0098-CFA-173	3,900	4		

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43	MUZL-0098-CFV-173		3,790	4			
44	MUZL-0077-CAA-173		3,060	4.2			
45	MUZL-0081-CAA-173		3,230	4.1			
46	MUZP-0050-CAA-173		2,010	4.2	3,960	6.3	
47	MUZP-0059-	CAA-173	2,310	4.3	4,710	6.1	
48	MUZP-0066-	CAA-173	3,020	4.7	5,270	5.7	
49	MUZP-0072-	CAV-173	3,170	4.3	5,770	5.5	
50	MUGL-H106-	CFA-173	4,250	4.2			
51	MUGL-H106-CFV-173		4,110	4.1			
52	MUZL-H100-	CFA-173	4,000	4.1			
53	MUZL-H100-	CFV-173	3,890	4.1			
54	MUGL-H082-	CAA-173	3,270	4.2			
55	MUGL-H086-	CAA-173	3,450	4.2			
56	MUGP-H054	-CAA-173	2,180	4.1	4,300	6.5	
57	MUGP-H065-CAA-173		2,410	4.2	5,180	6.5	
58	MUGP-H073-	-CAA-173	3,290	4.7	5,840	6.3	
59	MUGP-H081	-CAV-173	3,400	4.3	6,450	6.1	
60	MUPL-0041-	AA-173	1,660	5.2	2,970	7.4	
61	MUPL-0029-IAA-173		1,370	4.6	2,580	6.9	
62	MUPL-0070-	CAA-173	2,800	4.4			
63	MUPL-0058-CAA-173		2,320	4.5			
64	MUPM-0048-CAA-173				3,860	6.2	
65	MUPL-0057-IAA-173		2,290	4.2			
66	MUPM-0047-IAA-173				3,800	5.8	
67	MUPM-0039-IAA-173				3,500	5	
68	MUPL-0045-	AA-173	1,800	4.4			
69	MUPM-0031-IAA-173				2,510	6.6	
70	MUPM-0024-IAA-173				2,050	5.9	
71	MUPM-0022	-IAA-173			1,800	5.9	
72	MUPL-0024-IAA-173		960	4.6	1,830	7.2	
73	MUPP-0018-RAA-173		803	5.4	1,540	8.5	
74	MUPP-0022-RAA-173		1,040	5.6	1,890	8	
75	MUPP-0025-RAA-173		1,170	5.5	2,180	8	
76	MUPP-0028-RAA-173		1,380	5.5	2,460	7.4	