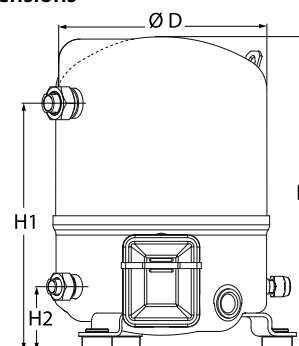


**General Characteristics**

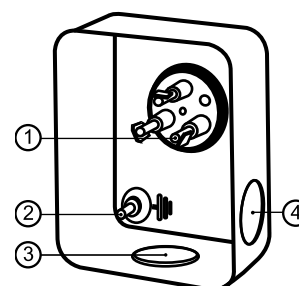
Model number (on compressor nameplate)		<b>MT18JA5CVE</b>
Code number for Singlepack*		MT18-SVI
Code number for Industrial pack**		MT18-5VM
Drawing number		8501021e
Suction and discharge connections		Rotolock
Suction connection		1 " Rotolock
Discharge connection		1 " Rotolock
Suction connection with supplied sleeve		1/2 " ODF
Discharge connection with supplied sleeve		3/8 " ODF
Oil sight glass		Threaded
Oil equalisation connection		3/8" flare SAE
Oil drain connection		None
LP gauge port		Schrader
IPR valve		None
Cylinders	1	
Swept volume	30.23 cm <sup>3</sup> /rev	
Displacement @ Nominal speed	5.3 m <sup>3</sup> /h @ 2900 rpm	
Net weight	21 kg	
Oil charge	0.95 litre, Mineral - 160P	
Maximum system test pressure Low Side / High side	25 bar(g) / 30 bar(g)	
Maximum differential test pressure	30 bar	
Maximum number of starts per hour	12	
Refrigerant charge limit	3 kg	
Approved refrigerants	R22, R417A-160PZ	

**Dimensions**


D=224 mm  
 H=333 mm  
 H1=263 mm  
 H2=68 mm  
 H3= mm

**Electrical Characteristics**

Nominal voltage	220-240V/1/50Hz
Voltage range	220-240 V
Winding resistance (main / start) at 25°C	1.35 Ω / 3.83 Ω
Run capacitors A + C	20 µF + 10 µF
Start capacitor B	100 µF
Start relay	RVA-6AMKL
Maximum Continuous Current (MCC)	10 A
Locked Rotor Amps (LRA)	40 A
Motor protection	Internal overload protector

**Terminal box**

**Recommended Installation torques**

Oil sight glass	50 Nm
Power connections / Earth connection	2 Nm / 2 Nm
Mounting bolts	15 Nm

IP55 (with cable gland)

- 1: Spade connectors 1/4"
- 2: Earth M4-12
- 3: Knock-out Ø 21 mm (0.83")
- 4: Hole Ø 21 mm (0.83")

**Parts shipped with compressor**

Mounting kit with grommets, bolts, nuts, sleeves and washers
Suction & Discharge solder sleeves, rotolock nuts and gaskets (shipped with rotolock version only)
Initial oil charge
Installation instructions

**Approvals :** CE certified, -, CCC certified

\*Singlepack: Compressor in cardboard box

\*\*Industrial pack: 12 Unboxed compressors on pallet (order per multiples of 12)

**Performance data at 50 Hz, EN 12900 rating conditions**
**R22**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-25	-20	-15	-10	-5	0	5	10	15

**Cooling capacity in W**

30	800	1 169	1 639	2 226	2 947	3 819	4 858	6 081	7 504
35	700	1 049	1 493	2 049	2 731	3 558	4 546	5 711	7 070
40	611	936	1 350	1 870	2 510	3 288	4 221	5 324	6 615
45	532	830	1 211	1 690	2 284	3 010	3 884	4 921	6 140
50	-	733	1 076	1 512	2 056	2 725	3 536	4 504	5 646
55	-	-	947	1 335	1 825	2 434	3 178	4 073	5 135
60	-	-	-	1 161	1 594	2 138	2 812	3 629	4 608
65	-	-	-	-	1 362	1 839	2 438	3 175	4 065

**Power input in W**

30	587	691	789	876	950	1 005	1 037	1 043	1 018
35	610	719	823	918	1 000	1 066	1 111	1 130	1 120
40	629	743	855	959	1 051	1 128	1 186	1 220	1 226
45	644	765	884	997	1 101	1 191	1 262	1 312	1 334
50	-	782	910	1 034	1 150	1 253	1 340	1 406	1 446
55	-	-	933	1 069	1 197	1 315	1 418	1 501	1 561
60	-	-	-	1 100	1 243	1 376	1 495	1 597	1 677
65	-	-	-	-	1 285	1 435	1 573	1 694	1 795

**Current consumption in A**

30	4.80	4.97	5.14	5.31	5.46	5.57	5.64	5.65	5.58
35	4.85	5.01	5.20	5.38	5.56	5.70	5.80	5.85	5.83
40	4.88	5.06	5.26	5.47	5.67	5.84	5.98	6.07	6.10
45	4.91	5.10	5.32	5.55	5.78	5.99	6.18	6.31	6.39
50	-	5.13	5.37	5.63	5.90	6.15	6.38	6.57	6.70
55	-	-	5.42	5.72	6.02	6.32	6.60	6.84	7.04
60	-	-	-	5.79	6.14	6.49	6.82	7.12	7.39
65	-	-	-	-	6.26	6.66	7.05	7.42	7.75

**Mass flow in kg/h**

30	18	25	35	47	61	78	98	121	148
35	16	24	33	45	59	76	95	118	145
40	14	22	31	42	56	73	92	115	141
45	13	20	29	40	53	69	88	111	137
50	-	19	27	37	50	66	84	106	131
55	-	-	25	35	47	62	79	100	125
60	-	-	-	32	43	57	74	94	118
65	-	-	-	-	39	52	68	87	110

**Coefficient of performance (C.O.P.)**

30	1.36	1.69	2.08	2.54	3.10	3.80	4.68	5.83	7.37
35	1.15	1.46	1.82	2.23	2.73	3.34	4.09	5.05	6.31
40	0.97	1.26	1.58	1.95	2.39	2.91	3.56	4.37	5.40
45	0.83	1.09	1.37	1.69	2.07	2.53	3.08	3.75	4.60
50	-	0.94	1.18	1.46	1.79	2.17	2.64	3.20	3.90
55	-	-	1.01	1.25	1.52	1.85	2.24	2.71	3.29
60	-	-	-	1.06	1.28	1.55	1.88	2.27	2.75
65	-	-	-	-	1.06	1.28	1.55	1.87	2.27

**Nominal performance at to = 5 °C, tc = 50 °C**

Cooling capacity	3 536	W
Power input	1 340	W
Current consumption	6.38	A
Mass flow	84	kg/h
C.O.P.	2.64	

**Pressure switch settings**

Maximum HP switch setting	27.9	bar(g)
Minimum LP switch setting	0.7	bar(g)
LP pump down setting	0.9	bar(g)

**Sound power data**

Sound power level	70	dB(A)
With acoustic hood	62	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

Tolerance according EN12900

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**Performance data at 50 Hz, ARI rating conditions**
**R22**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-25	-20	-15	-10	-5	0	5	10	15

**Cooling capacity in W**

30	849	1 240	1 738	2 359	3 121	4 041	5 137	6 425	7 924
35	746	1 117	1 589	2 178	2 901	3 777	4 822	6 053	7 488
40	653	1 001	1 442	1 995	2 676	3 503	4 493	5 663	7 030
45	572	892	1 299	1 812	2 446	3 220	4 151	5 255	6 551
50	-	791	1 160	1 628	2 212	2 929	3 796	4 831	6 052
55	-	-	1 027	1 446	1 975	2 631	3 431	4 392	5 532
60	-	-	-	1 266	1 736	2 326	3 055	3 939	4 995
65	-	-	-	-	1 496	2 017	2 670	3 472	4 440

**Power input in W**

30	587	691	789	876	950	1 005	1 037	1 043	1 018
35	610	719	823	918	1 000	1 066	1 111	1 130	1 120
40	629	743	855	959	1 051	1 128	1 186	1 220	1 226
45	644	765	884	997	1 101	1 191	1 262	1 312	1 334
50	-	782	910	1 034	1 150	1 253	1 340	1 406	1 446
55	-	-	933	1 069	1 197	1 315	1 418	1 501	1 561
60	-	-	-	1 100	1 243	1 376	1 495	1 597	1 677
65	-	-	-	-	1 285	1 435	1 573	1 694	1 795

**Current consumption in A**

30	4.80	4.97	5.14	5.31	5.46	5.57	5.64	5.65	5.58
35	4.85	5.01	5.20	5.38	5.56	5.70	5.80	5.85	5.83
40	4.88	5.06	5.26	5.47	5.67	5.84	5.98	6.07	6.10
45	4.91	5.10	5.32	5.55	5.78	5.99	6.18	6.31	6.39
50	-	5.13	5.37	5.63	5.90	6.15	6.38	6.57	6.70
55	-	-	5.42	5.72	6.02	6.32	6.60	6.84	7.04
60	-	-	-	5.79	6.14	6.49	6.82	7.12	7.39
65	-	-	-	-	6.26	6.66	7.05	7.42	7.75

**Mass flow in kg/h**

30	17	25	35	47	61	78	98	121	148
35	16	23	33	44	58	75	95	118	144
40	14	22	31	42	56	72	92	114	141
45	13	20	29	40	53	69	88	110	136
50	-	19	27	37	50	65	84	105	130
55	-	-	25	35	47	61	79	100	124
60	-	-	-	32	43	57	74	94	117
65	-	-	-	-	39	52	68	87	109

**Coefficient of performance (C.O.P.)**

30	1.45	1.80	2.20	2.69	3.29	4.02	4.95	6.16	7.78
35	1.22	1.55	1.93	2.37	2.90	3.54	4.34	5.36	6.69
40	1.04	1.35	1.69	2.08	2.55	3.11	3.79	4.64	5.74
45	0.89	1.17	1.47	1.82	2.22	2.70	3.29	4.01	4.91
50	-	1.01	1.27	1.57	1.92	2.34	2.83	3.44	4.18
55	-	-	1.10	1.35	1.65	2.00	2.42	2.93	3.54
60	-	-	-	1.15	1.40	1.69	2.04	2.47	2.98
65	-	-	-	-	1.16	1.41	1.70	2.05	2.47

**Nominal performance at to = 7.2 °C, tc = 54.4 °C**

Cooling capacity	3 881	W
Power input	1 447	W
Current consumption	6.68	A
Mass flow	88	kg/h
C.O.P.	2.68	

**Pressure switch settings**

Maximum HP switch setting	27.9	bar(g)
Minimum LP switch setting	0.7	bar(g)
LP pump down setting	0.9	bar(g)

**Sound power data**

Sound power level	70	dB(A)
With accoustic hood	62	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Tolerance according EN12900

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