

MBSM.PRO , HYE69YL ,Compressor (LBP) , China R134a ,Huayi Compressor Co., Ltd, 69 YL ,1/4 Hp ,168Kcal , 220V

Category: Solutions,Tester ok
written by Jamila | 6 October 2018



Picture5 Mbsm Dot Pro : www.mbsm.pro

MBSM.PRO , HYE69YL ,Compressor (LBP) , China R134a ,Huayi Compressor Co., Ltd,
69 YL ,1/4 Hp ,168Kcal , 220V

Test conditions	According to ASHRAE
Evaporating temperature	-23.3[°C]
Condensing temperature	54.4[°C]
Subcooling temperature	32.2[°C]
Suction temperature	32.2[°C]
Ambient temperature	32.2[°C]
Working condition limit:R134a	
Max ambient temperature	43[°C]
Evaporation temperature range	-35~-15[°C]
Working voltage range.	187~254/98~127[V]
Max discharge pressure	2.0[Mpa](gauge pressure)
Max allowable housing temperature	95[°C]
Max discharge temperature	125[°C]
Max pressure housing endured	2.7[Mpa](gauge pressure)

Low voltage start

0.4/0.4Mpa(gauge pressure)187V/98V

Product model:HYE69YL

Cooling capacity:195W

COP[W/W]:1.15

Voltage[V]:220-240~

Frequency(Hz):50



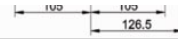
Products

- R134a Compressor (LBP)
 - HYE Serie
 - HY Serie
 - HYB Serie
 - HYS Serie
- R600a Compressor (LBP)
 - HYE Serie
 - HY Serie
 - HYB Serie
 - HYS Serie
- R134a Compressor (MBP,HBP)
 - HY Serie
 - HYE Serie

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5.5



Product model:HYE69YL
 Cooling capacity:195W
 COP (W/W) :1.15
 Voltage (V) :220-240-
 Frequency(Hz):50

Test conditions	According to ASHRAE
Evaporating temperature	-23.3°C
Condensing temperature	54.4°C
Subcooling temperature	32.2°C
Suction temperature	32.2°C
Ambient temperature	32.2°C
Working condition limit:R134a	
Max ambient temperature	43[°C]
Evaporation temperature range	-35~-15[°C]
Working voltage range.	187~254/98~127[V]
Max discharge pressure	2.0[Mpa](gauge pressure)
Max allowable housing temperature	95[°C]
Max discharge temperature	125[°C]
Max pressure housing endured	2.7[Mpa](gauge pressure)
Low voltage start	0.40.4Mpa(gauge pressure)187V/98V



AE 1330 Y

1 / 12 HP



AE 1340 Y

1 / 6 HP



AE 1350 Y

1 / 6 HP



AE 1360 Y

1 / 5 HP



AE 1370 Y

1 / 4 HP



AE 1390 Y

1 / 4 HP





HY 81 Y

1 / 4 HP



HYE 55 YL 63

1 / 6 HP



HYE 60 YL 63

1 / 5 HP



HYE 69 YL

1 / 4 HP



HYE 125 MSU

1 / 4 HP





Huayi HYE 69 YL 1/4 Hp 168Kcal R134a 220V

Huayi - Huayi

Huayi HYE 55 YL 63 1/6 Hp 129Kcal R134a 220V

Huayi - Huayi

Huayi HYE 60 YL 63 1/5 Hp 146Kcal R134a 220V

Huayi - Huayi

Huavi HY 81 Y 1/4+ Hp 202Kcal R134a 220V

PictureS Mbsm Dot Pro : www.mbsm.pro



HYE 125 MSU

HYE 69 YL

HYE 60 YL 63

HYE 55 YL 63

HY 81 Y

AE 1390 Y

AE 1370 Y

AE 1360 Y

AE 1350 Y

AE 1340 Y

AE 1330 Y

PictureS Mbsm Dot Pro : www.mbsm.pro





Mbsm.pro , Compressor ACC ,Cubigel
Huayi, Electrolux ZEM, GP12TG, HMBP-
R134a, 220-230V ,50/60Hz, 3.8 HP

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Mbsm.pro , Compressor ACC ,Cubigel Huayi, Electrolux ZEM, GP12TG, HMBP-R134a, 220-230V ,50/60Hz, 3.8 HP



COMPRESSOR

Displacement (cm ³)	12
Diameter (mm)	29.37
Stroke (mm)	17.8
Net Weight (Kg)	11.2
Oil type	ISO VG 22 ESTER
Oil charge (cm ³)	400

MOTOR

Approximate Power (CV)	3/8
Voltage/Frequency (V/Hz)	200V 50Hz
Voltage range (V)	170-242
Code	61.575
Type	CSIR
Phase number	1 PH
Locked rotor current (A)	16.0
Main W. resist. at 25°C (Ω)	4.59
Start W. resist. at 25°C (Ω)	16.52

APPLICATION

Application	High/Mid. back pressure
Refrigerant	R134a
Evaporating (°C)	-25 to 10
Expansion	Capillar/Valve
Comp. cooling	Fan cooled
Max. ambient temp. (°C)	43

NOMINAL PERFORMANCE	CYCLE C	CYCLE D
Cooling capacity (kcal/h)	768	920
Input power (W)	505	530
EER (kcal/Wh)	1.52	1.73
COP (W/W)	1.76	2.01
Current (A)	3.29	3.39

TEST CONDITIONS

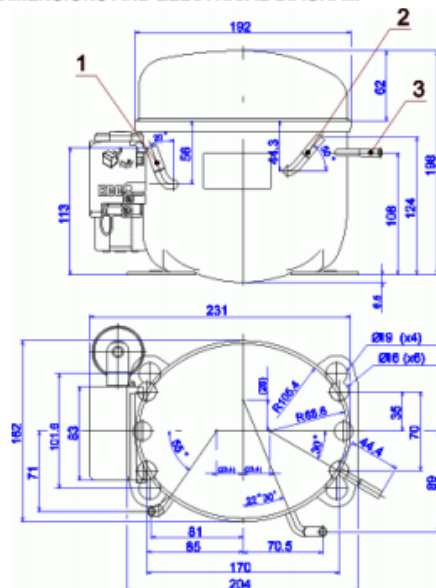
Evaporating temp. (°C)	5.0	7.2
Condensing temp. (°C)	55.0	55.0
Liq.t. entering expan. (°C)	55.0	46.0
Ambient t. and return (°C)	32.0	35.0
Tens/Freq (V/Hz)	200V 50Hz	200V 50Hz

ELECTRICAL COMPONENTS

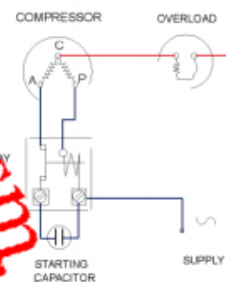
Relay	2014 149.
Pick-Up (A)	7.80


ELECTRICAL COMPONENTS

Relay	2014 149.
Pick-Up (A)	7.80
Drop-Out (A)	6.65
Protector	MRT20APK T0188
Current (A)	13.2 12.3
Time check (seg)	7.5-14 7.5-14
Disc temp. (Open/Close) (°C)	105.0 / 61.0 115.0 / 61.0
Starting capacitor (μFV/FV)	47- 56 / 330

DIMENSIONS AND ELECTRICAL DIAGRAM


DESIGNATION	INTERNAL DIAM. (MM)
1 Suction/Service	8.1
2 Service/Suction	8.1
3 Discharge	6.5

CSIR


Mbsm.pro , Qb73c15gax5 ,R134a , Refrigeration Compressor ,1/4 Hp, Panasonic compressor catalogue, QB series , 1Ph , 220V 50Hz

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Mbsm.pro , Qb73c15gax5 ,R134a , Refrigeration Compressor ,1/4 Hp, Panasonic compressor catalogue, QB series , 1Ph , 220V 50Hz

Rated voltage / Frequency	Model	ASHRAE								Voltage range
		50Hz				60Hz				
		Capacity		COP - WW		Capacity		COP - WW		
		W	kcal/hr	RSIR	RSCR	W	kcal/hr	RSIR	RSCR	
220V 50Hz/60Hz	QB51C99GAX0	128	110	1.14	-	157	135	1.17	-	170V-250V 50Hz 187V-242V 60Hz
	QB57C11GAX0	146	126	1.18	-	175	151	1.22	-	
	QB66C16GAX0	165	142	1.20	-	200	172	1.27	-	
	QB77C18GAX0	202	174	1.21	-	224	193	1.27	-	
	QB91C24GAX0	236	203	1.19	-	255	219	1.22	-	
220V 50Hz	QB66C13GAX5	165	142	1.19	-					170V-250V
	QB73C15GAX5	185	159	1.19	-					
	QB77C16GAX5	202	174	1.22	-					
	QB91C19GAX5	236	203	1.25	-					

Rated voltage / Frequency	Model	ASHRAE								Voltage range
		50Hz				60Hz				
		Capacity		COP - WW		Capacity		COP - WW		
		W	kcal/hr	CSIR	RSCR	W	kcal/hr	CSIR	RSCR	
220V 50z/60Hz	QB110C25CAX0	273	235	1.18	-	279	240	1.19	-	170V-250V 50Hz 198V-242V 60Hz

PictureS Mbsm Dot Pro : www.mbsm.pro



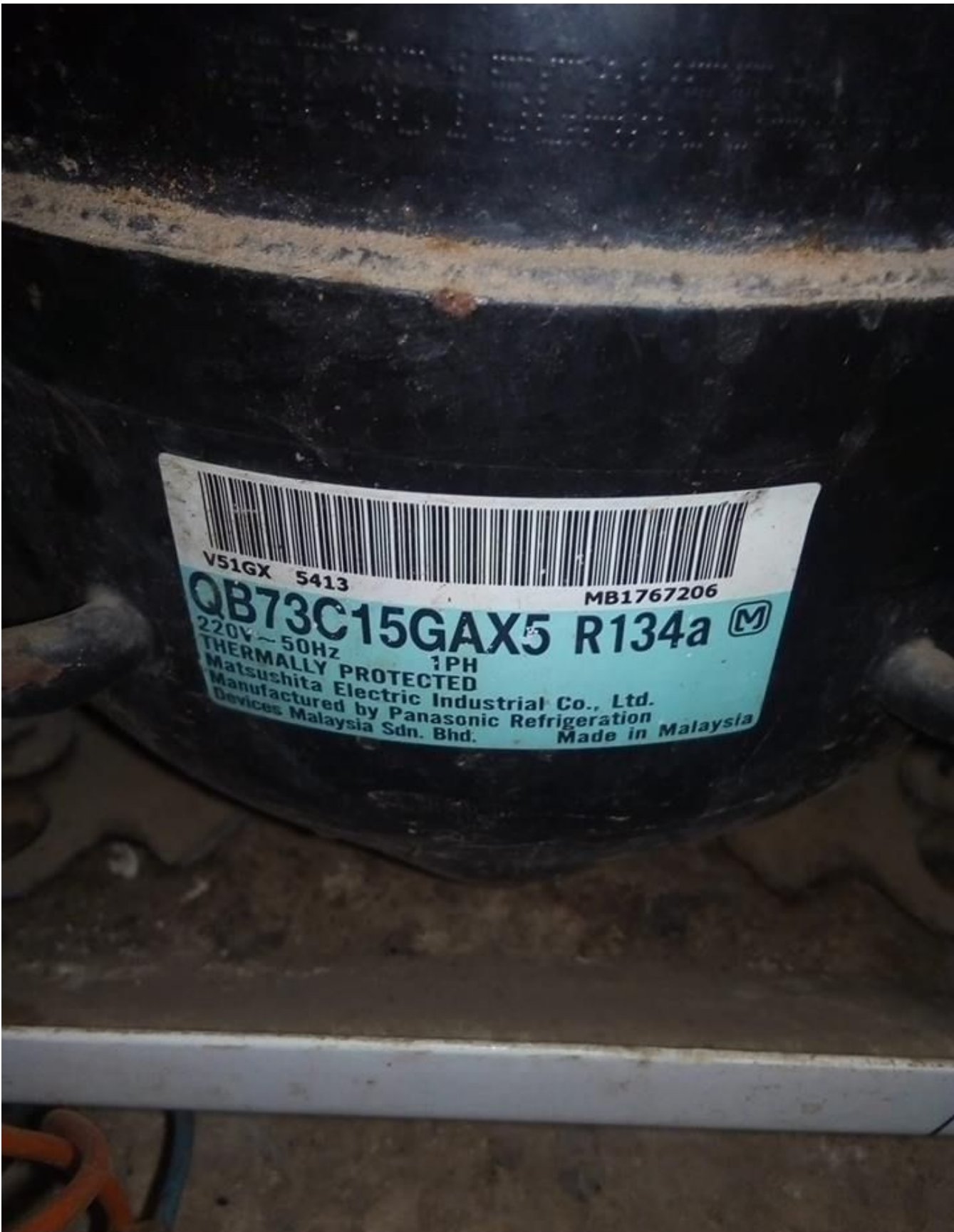
PictureS Mbsm Dot Pro : www.mbsm.pro

Panasonic Compressor R134a QB series
Performance DATA

Application & Refrigerant LBP R134a

Voltage	Model	Displacement cm ³	*2) Capacity (W)					*3) C.O.P.		*4) Motor type	Compressor cooling *5)			Net weight kg		Oil charge cm ³	
			Evaporating temperature					NO	YES		ST	OC	FC	ST/FC	OC	ST/FC	OC
			-30°C	-25°C	-23.3°C	-20°C	-15°C										
*6) 100V 50/60Hz	QB57C88RA00	5.65	118	161	178	213	271	1.27	1.33	RSIR/RSCR	O	-	O	9.1	-	250	-
	QB66C12CA00	6.55	119	164	185	219	293	1.19	-	CSIR	-	-	O	8.8	-	250	-
	QB66C13RA00	6.55	133	182	200	239	304	1.28	1.37	RSIR/RSCR	O	-	O	9.4	-	280	-
	QB86C18TA00	8.56	170	226	248	295	376	-	1.35	CSCR	-	-	O	9.9	-	280	-
	QB91C18CA00	9.07	163	226	251	303	394	-	1.21	CSIR	-	-	O	9.6	-	250	-
220V 50Hz	QB66C13GAX5	6.55	108	149	165	200	263	1.23	-	RSIR	O	-	-	9.2	-	250	-
	QB73C15GAX5	7.27	121	167	185	224	294	1.23	-	RSIR	O	O	-	9.7	9.9	250	300
	QB77C16GAX5	7.69	131	182	202	245	319	1.26	-	RSIR	O	O	-	9.8	10.0	250	300
	QB86C18GAX5	8.56	145	200	222	268	347	1.26	-	RSIR	O	O	O	9.9	10.1	250	300
	QB91C19GAX5	9.07	154	213	236	285	372	1.29	-	RSIR	O	O	O	10.2	10.5	250	300
	QB110C25GAX5	10.86	176	246	273	331	432	1.18	-	RSIR	-	O	O	10.4	10.6	250	300
*4) 220-240V 50Hz	QB51C74GAW5	5.10	84	116	128	153	196	1.21	-	RSIR	O	-	-	8.7	-	250	-
	QB57C87GAW5	5.65	97	132	146	175	225	1.23	-	RSIR	O	-	-	8.9	-	250	-
	QB66C97GAW5	6.55	108	149	165	200	263	1.25	-	RSIR	O	O	-	9.1	-	250	-
	QB73C12GAW5	7.27	121	167	185	224	294	1.26	-	RSIR	O	O	-	9.3	-	250	-
	QB77C13GAW5	7.69	131	182	202	245	319	1.27	-	RSIR	O	O	-	9.4	-	250	-
	QB86C13GAW5	8.56	145	200	222	268	347	1.27	-	RSIR	O	O	-	9.5	-	250	-
	QB91C16GAW5	9.07	154	213	236	285	372	1.28	-	RSIR	O	O	-	9.6	-	250	-

PictureS Mbsm Dot Pro : www.mbsm.pro



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Mbsm.pro , Fn77q17g , 1/4Hp , Electrostar , R12 Refrigerator Compressors , 220V/50-60Hz , 1Ph ,for Refrigerator/Freezer

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Mbsm.pro , Fn77q17g , 1/4Hp , Electrostar , R12 Refrigerator Compressors ,
220V/50-60Hz , 1Ph ,for Refrigerator/Freezer



PictureS Mbsm Dot Pro : www.mbsm.pro

- 1) SO60LKAA OR equivalent in 1/10 HP
- 2) FN43Q88G OR equivalent in 1/8 HP
- 3) FN51Q10G OR equivalent in 1/6 HP
- 4) FN57Q12G OR equivalent in 1/5 HP
- 5) FN66Q14G OR equivalent in 1/5 HP Powerful
- 6) **FN77Q17G** OR equivalent in 1/4 HP
- 7) FN91Q20G OR equivalent in 1/4 HP Powerful
- 8) FN110Q24G OR equivalent in 1/3 HP



PictureS Mbsm Dot Pro : www.mbsm.pro

Compressor tests - Calorimeter

Type		FN77Q17G 1)	QA77C17GAX5	QA91C22GAX5
Parameter				
Evaporation temp.	[°C]	LBP -23,3	LBP -25 2) -23,3	LBP -25 -23,3
Refrigerant		R12	R134a	R134a
Q _o				
CECOMAF	[W]		116,7	135
ASHRAE	[W]	191	154,2	187,1
ASHRAE	[kcal/h]	165	132,6	161
P ₁				
CECOMAF	[W]		144,1	166,4
ASHRAE	[W]	180	148,4	171,4
COP				
CECOMAF	[W/W]		0,81	0,81
ASHRAE	[W/W]	1,06	1,04	1,09
Start test				
cold tw = 32 °C		-	o.k	o.k
warm tw = 100 °C		-	o.k	o.k

1) Leaflet data, original compressor

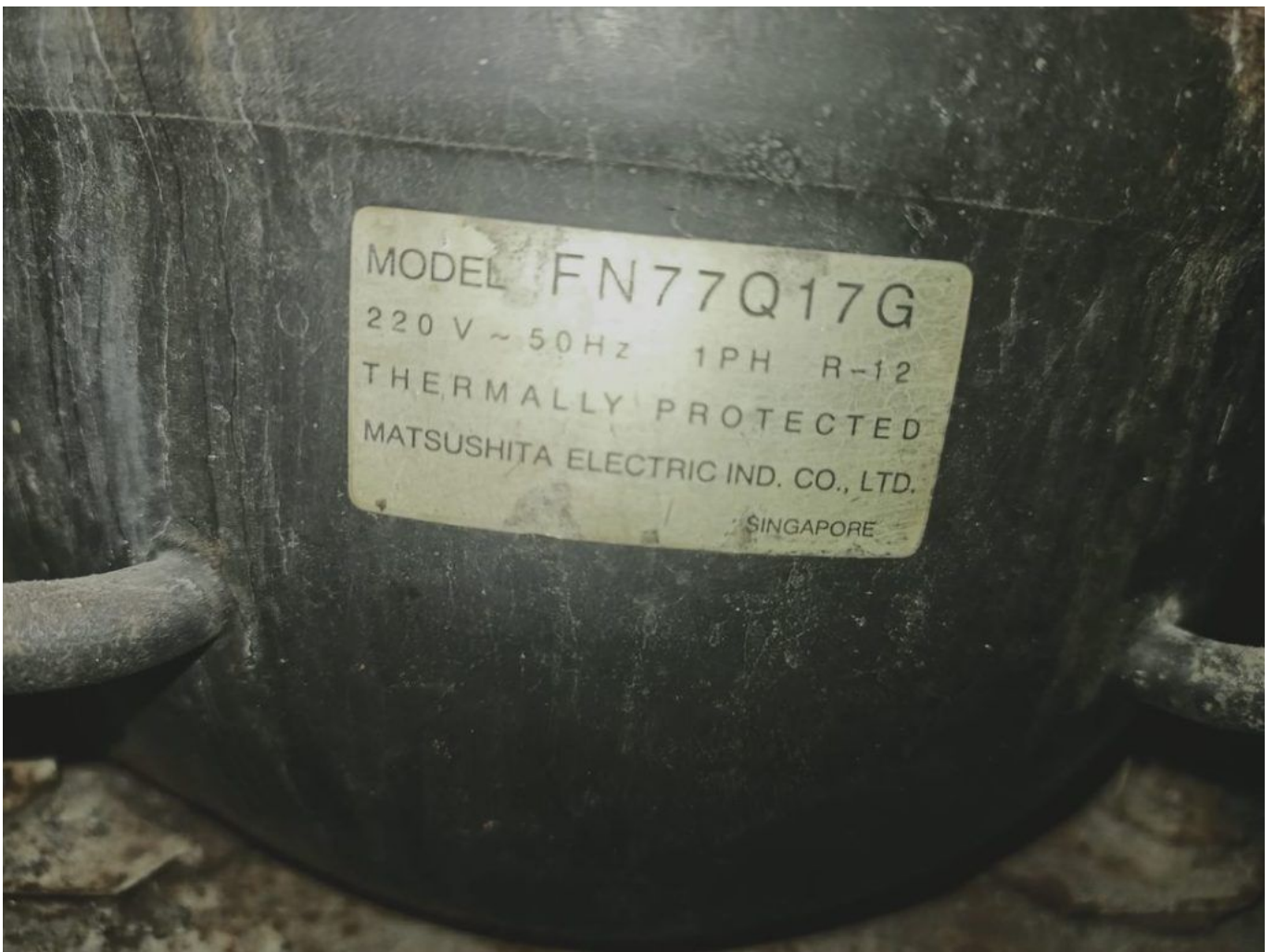
2) average two compressors, measuring



- 1) S060LKAA OR equivalent in 1/10 HP
- 2) FN43Q88G OR equivalent in 1/8 HP
- 3) FN51Q10G OR equivalent in 1/6 HP
- 4) FN57Q12G OR equivalent in 1/5 HP
- 5) FN66Q14G OR equivalent in 1/5 HP Powerful
- 6) FN77Q17G OR equivalent in 1/4 HP
- 7) FN91Q20G OR equivalent in 1/4 HP Powerful
- 8) FN110Q24G OR equivalent in 1/3 HP



MODEL FN77Q17G
220V ~ 50Hz 1PH R-12
THERMALLY PROTECTED
MATSUSHITA ELECTRIC IND. CO., LTD.
SINGAPORE



MODEL FN77Q17G
220 V ~ 50Hz 1PH R-12
THERMALLY PROTECTED
MATSUSHITA ELECTRIC IND. CO., LTD.
SINGAPORE

Mbsm.pro , Qb91c19gax5 , 1/4 hp,
qb110c21rpx5, 1/3 hp, Panasonic
,Compressor cooling ,1Ph ,220V

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PictureS Mbsm Dot Pro : www.mbsm.pro

Mbsm.pro , Qb91c19gax5 ,Panasonic ,Compressor cooling , 1/3HP ,236W ,1Ph ,220V