Mbsm.pro, Understanding, Motor, Starting , Systems, for, Compressor

Category: Chaud&Froid
written by www.mbsm.pro | 18 January 2025

Understanding the specifications of motor starting systems is crucial for optimizing performance and ensuring the longevity of your equipment. This guide provides a detailed breakdown of various motor starting systems, including their current ratings, temperature ranges, and power requirements. Whether you’re working with compressors or other industrial machinery, this information will help you select the right system for your needs. Dive into the tables below to explore the key characteristics of each system and make informed decisions for your applications.

Mbsm.pro, Motor, compressor, type, RSIR, RSCR, CSIR, CSCR, PSC

Category: compressor
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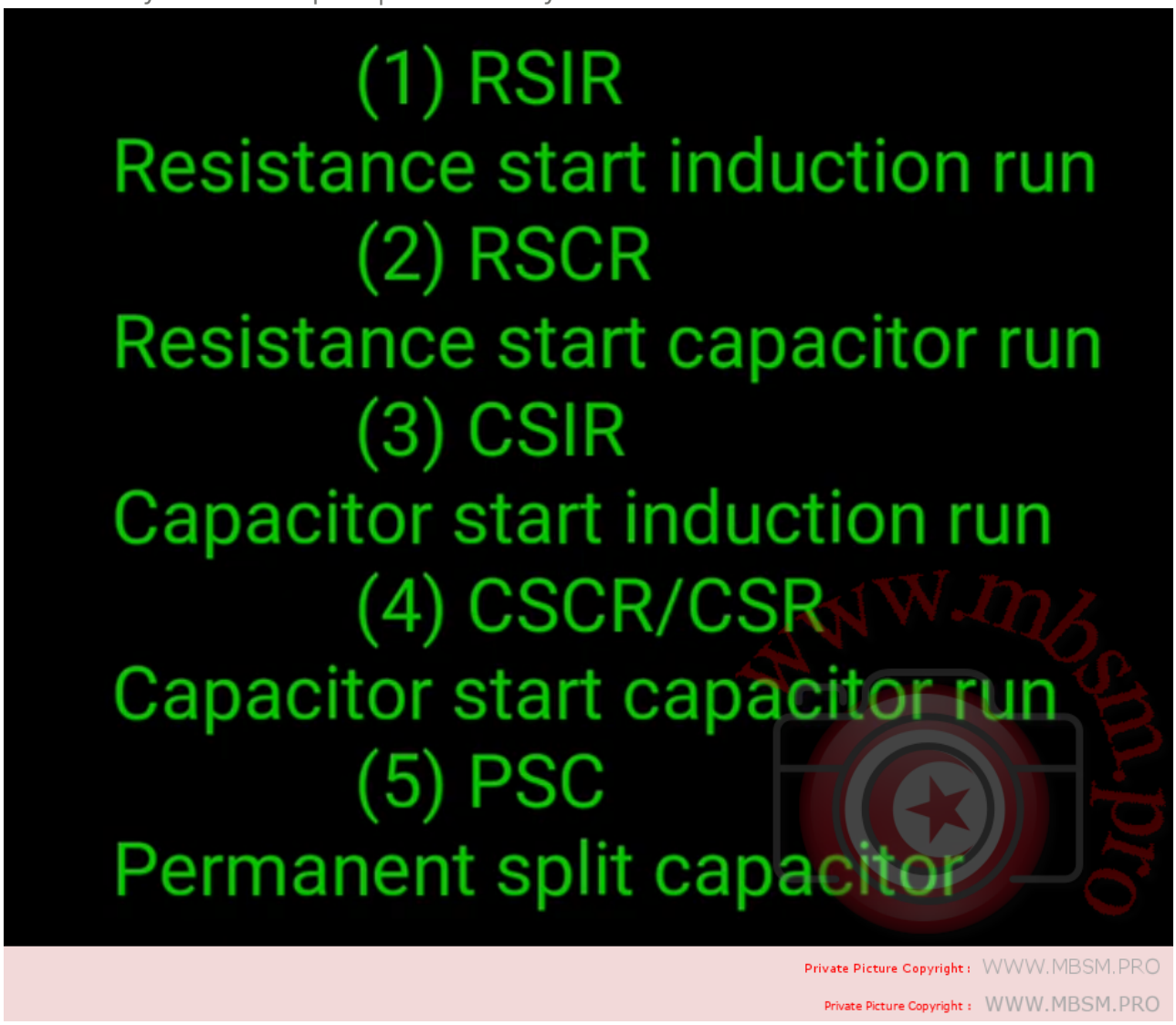

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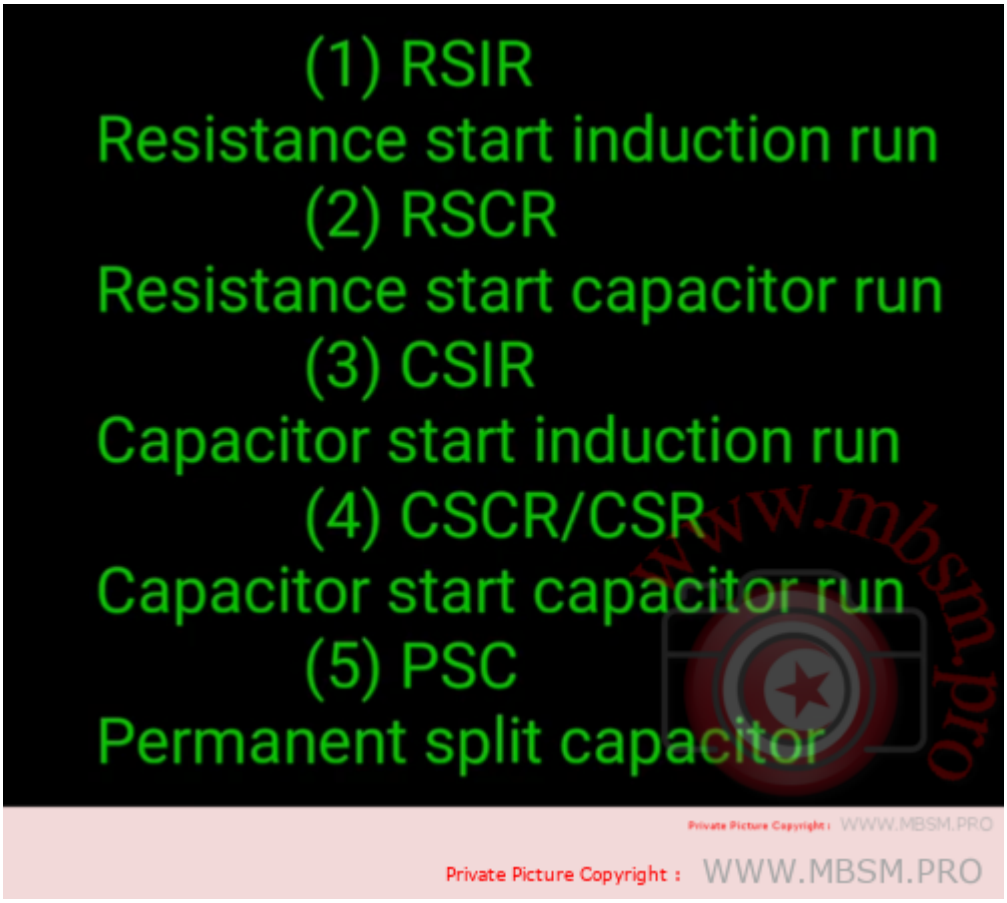
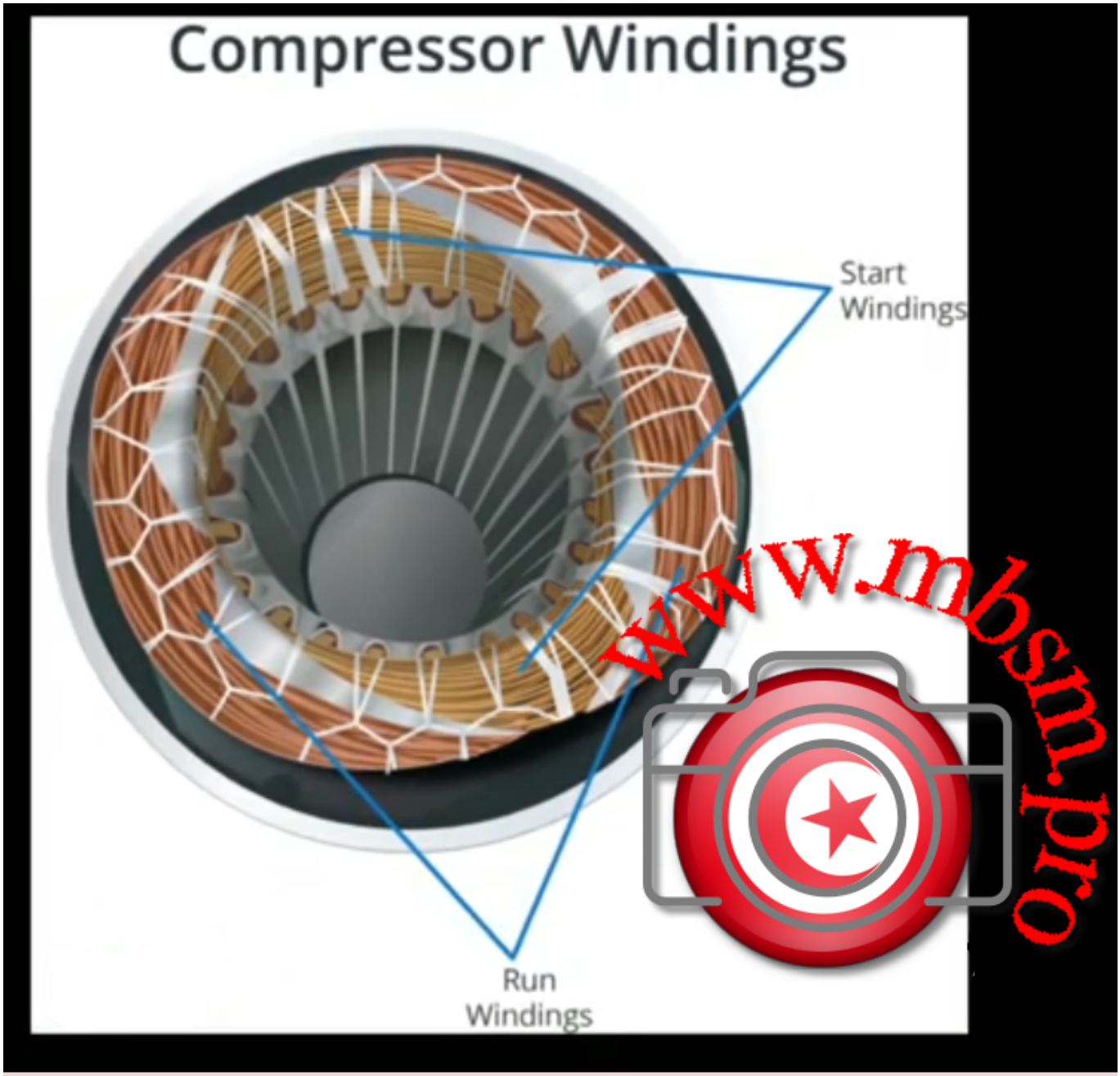
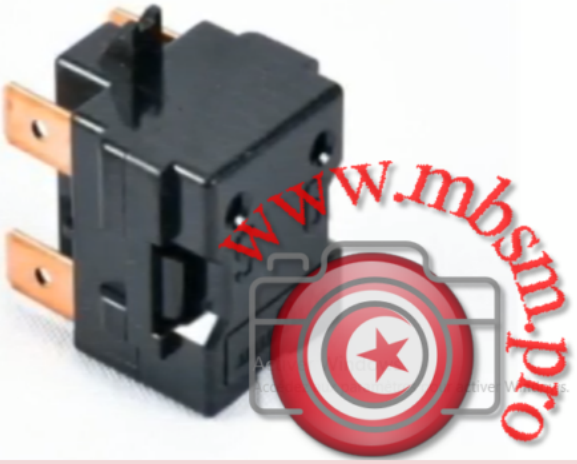
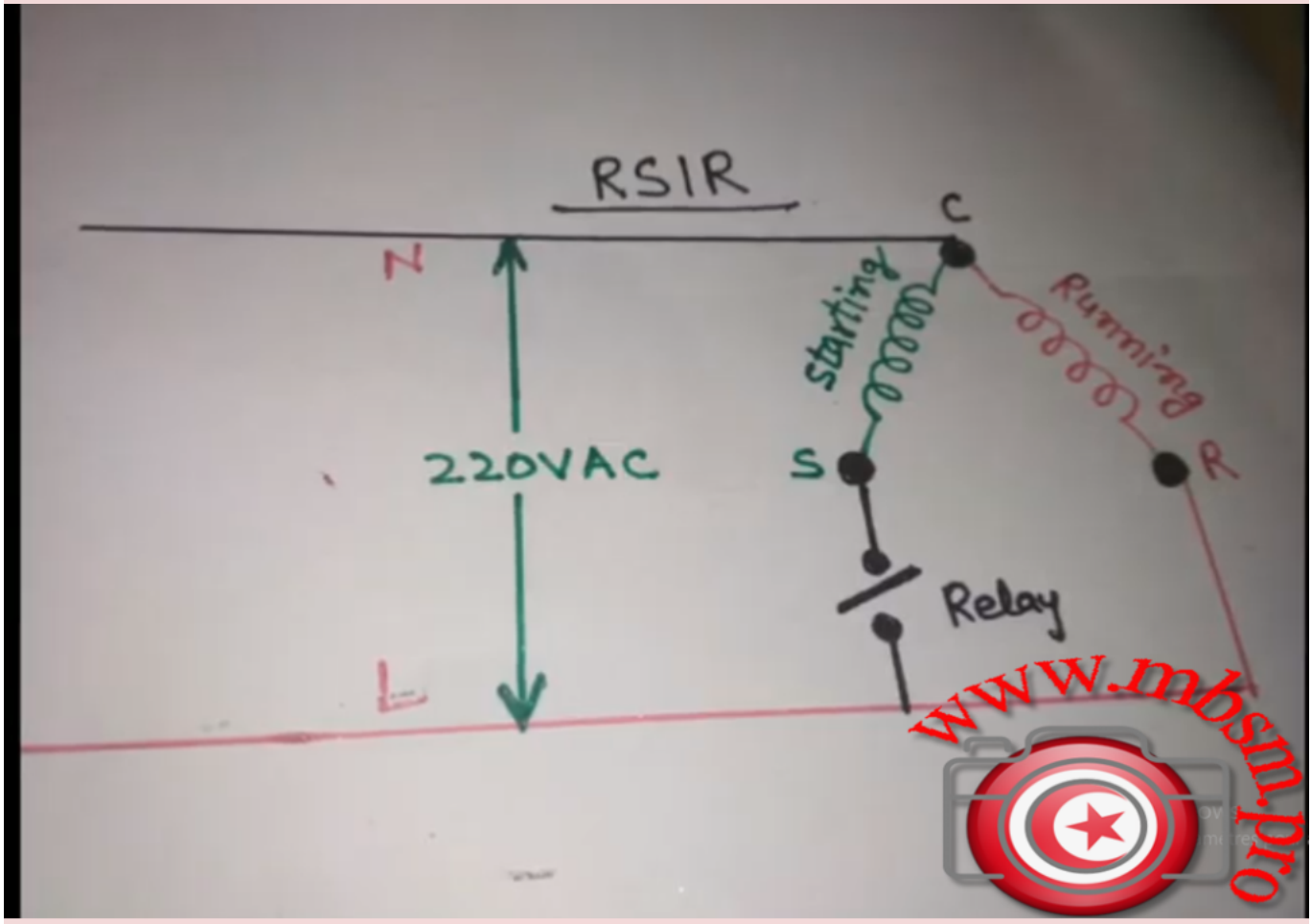




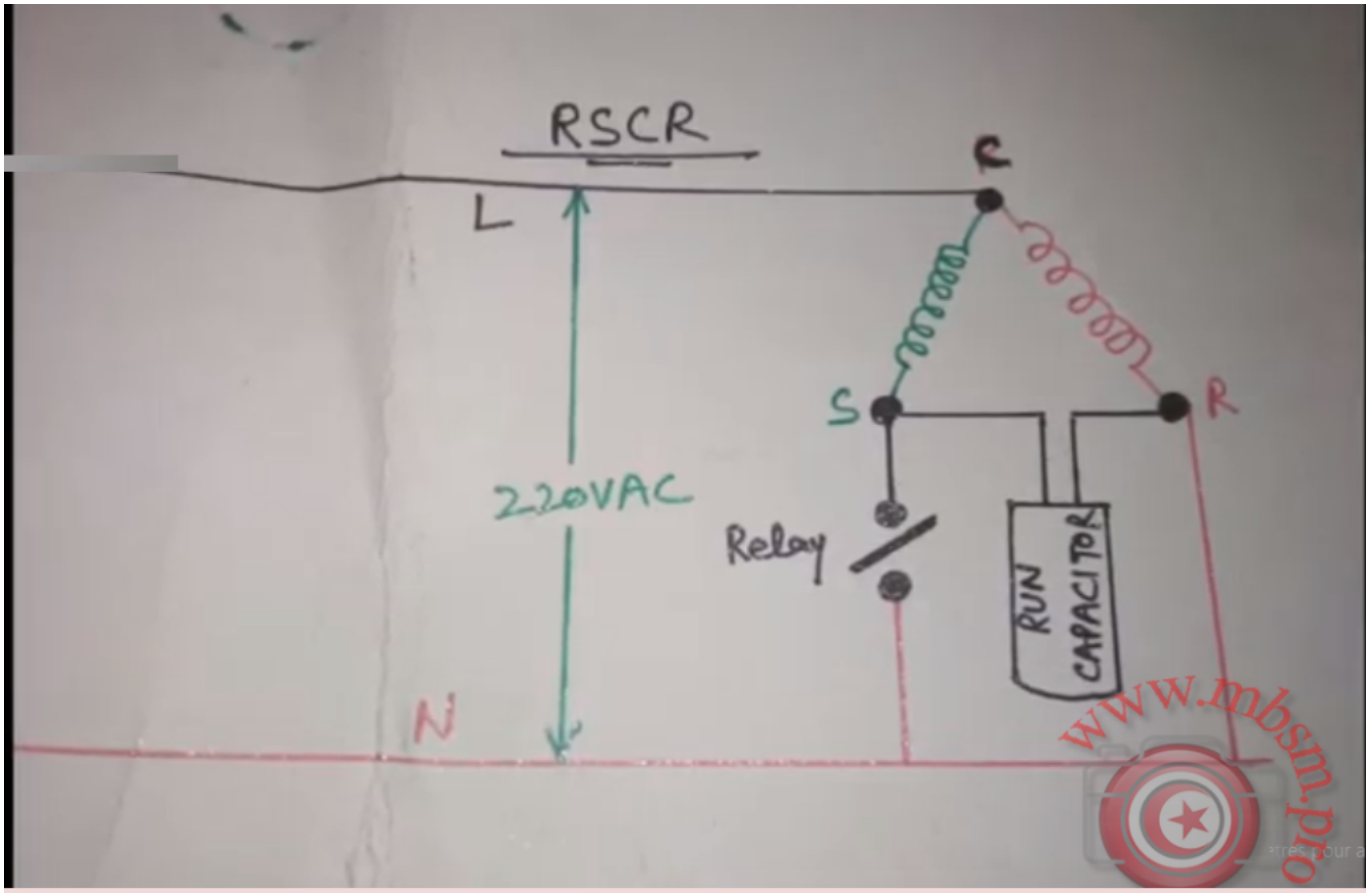
(1) RSIR
Resistance start induction run

RSIR

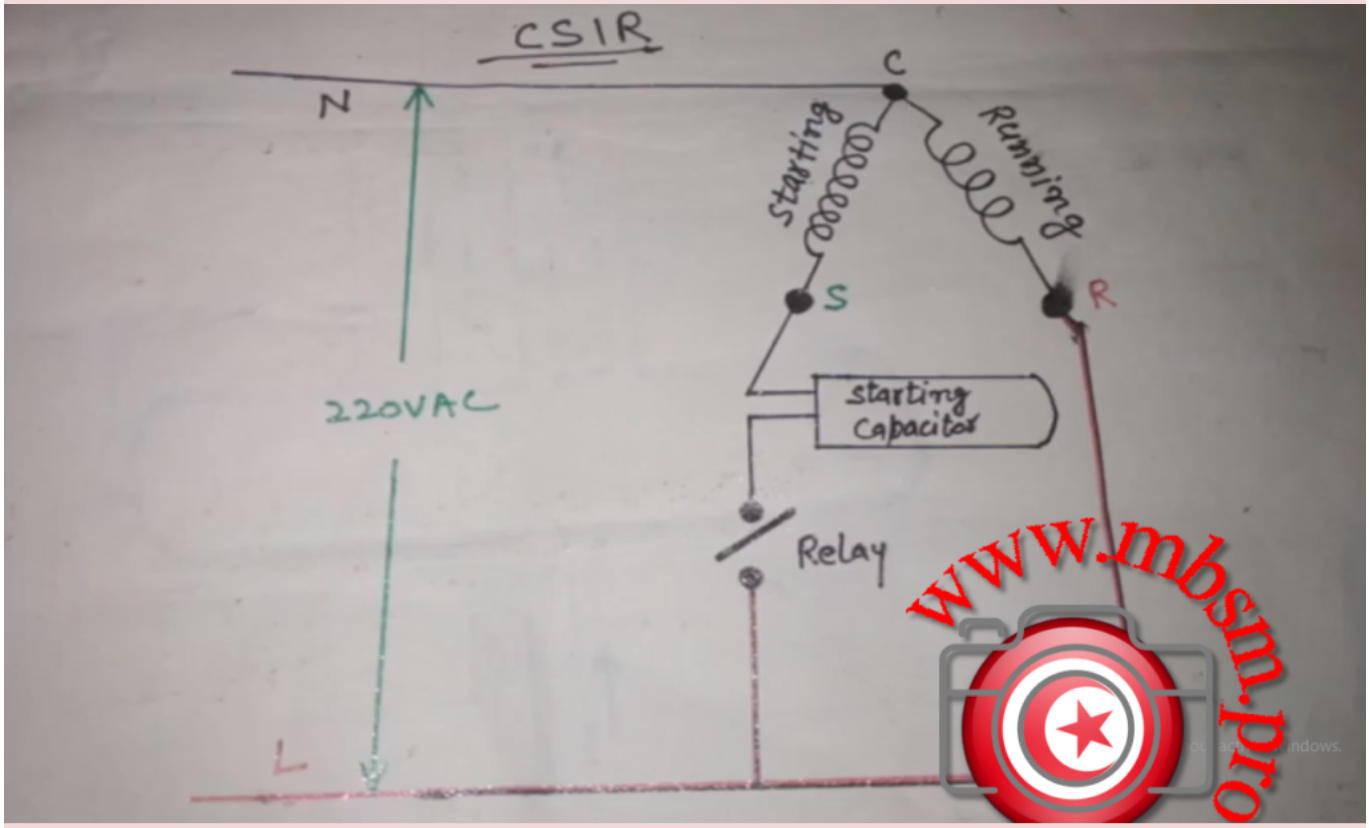




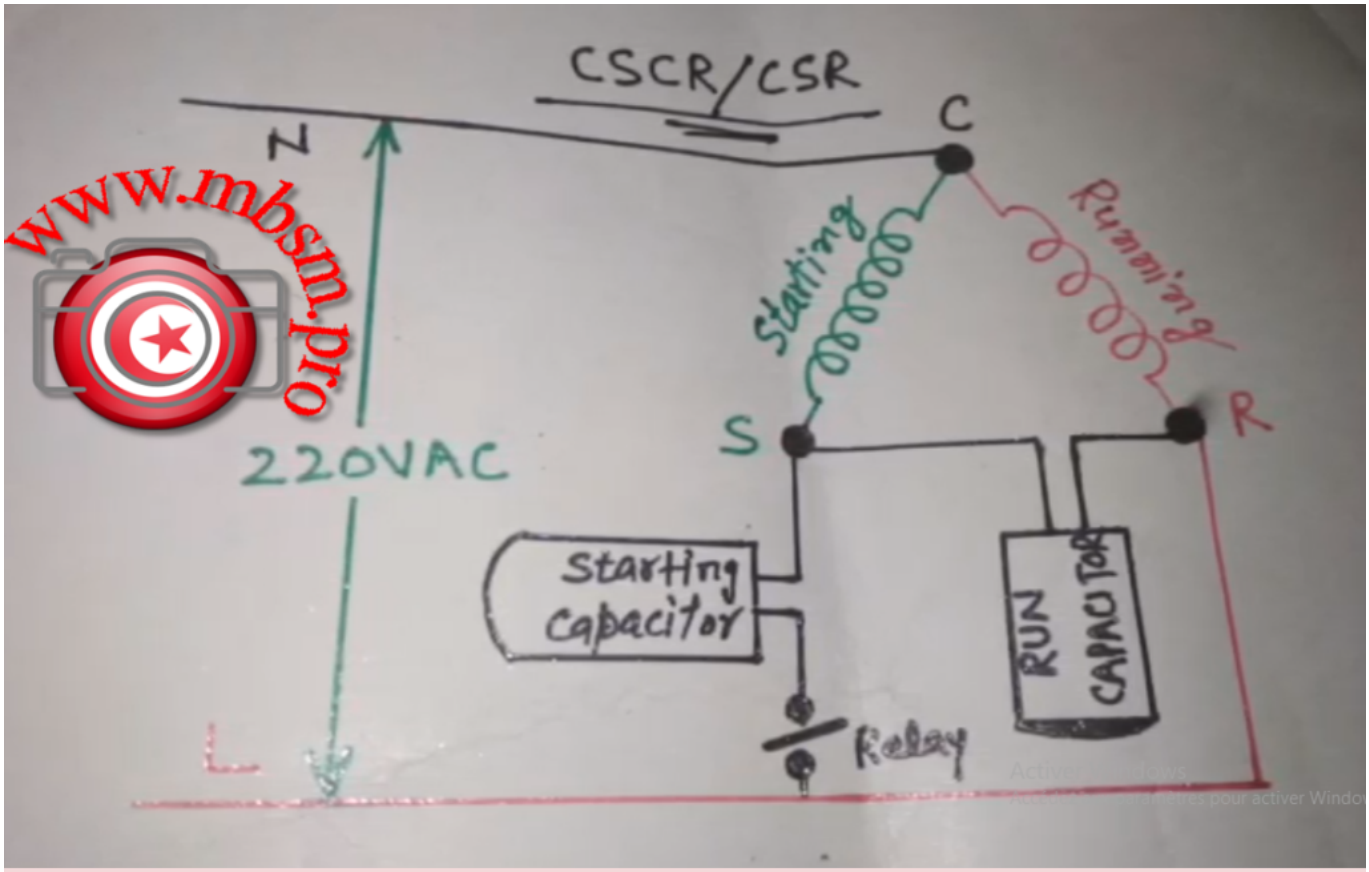
(2) RSCR
Resistance start capacitor run

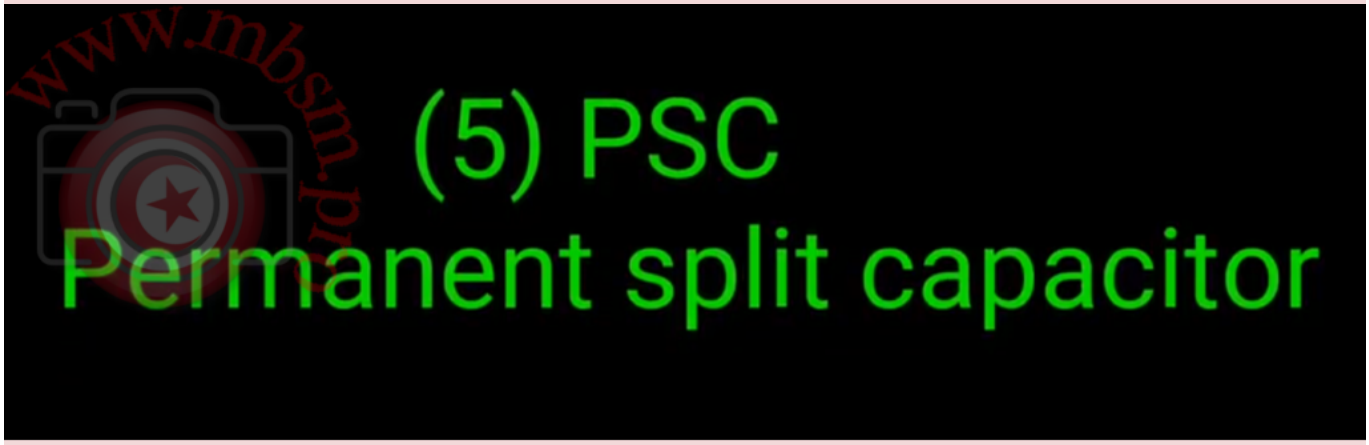


CSIR

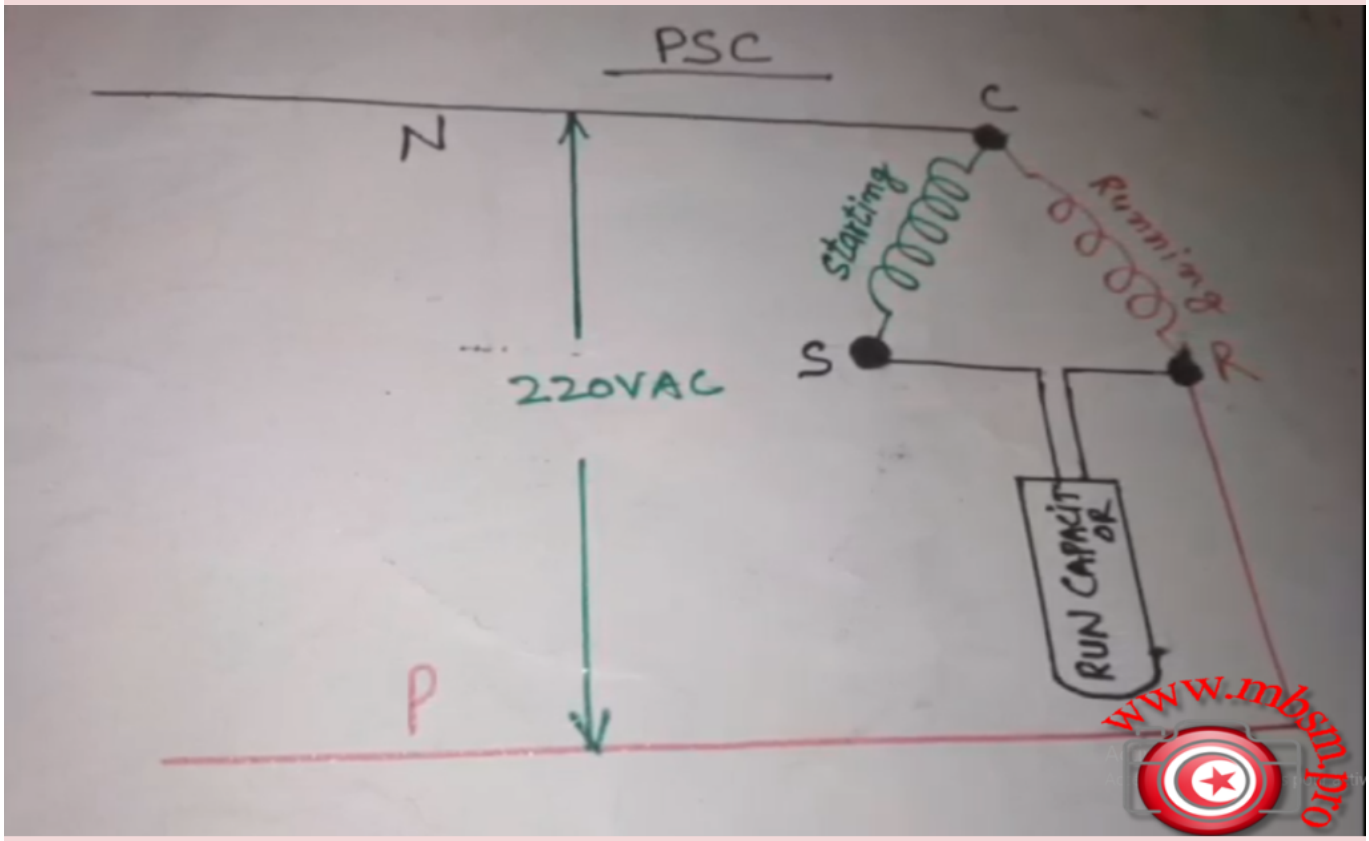


(4) CSCR/CSR
Capacitor start capacitor run





PSC



Compressor, NPT12FSC, CUBIGEL, R290, 12,10ccm, LBP, 3/8HP, 220 V 50/60 Hz

Category: compressor
written by www.mbsm.pro | 18 January 2025

Compressor, NPT12FSC, CUBIGEL, R290, 12,10ccm, LBP, 3/8HP, 220 V 50/60 Hz

R134A, LBP, Motor, Danfu, Compressor, PW2.0VK, 1/15hp

Category: compressor
written by www.mbsm.pro | 18 January 2025

R134A, LBP, Motor, Danfu, Compressor , PW2.0VK, 1/15hp

Types of Electrical Motors, RSIR, CSIR, RSCR, CSR, PTC, NTC, LST, HST, MBP, HBP, LBP

Category: compressor,Files
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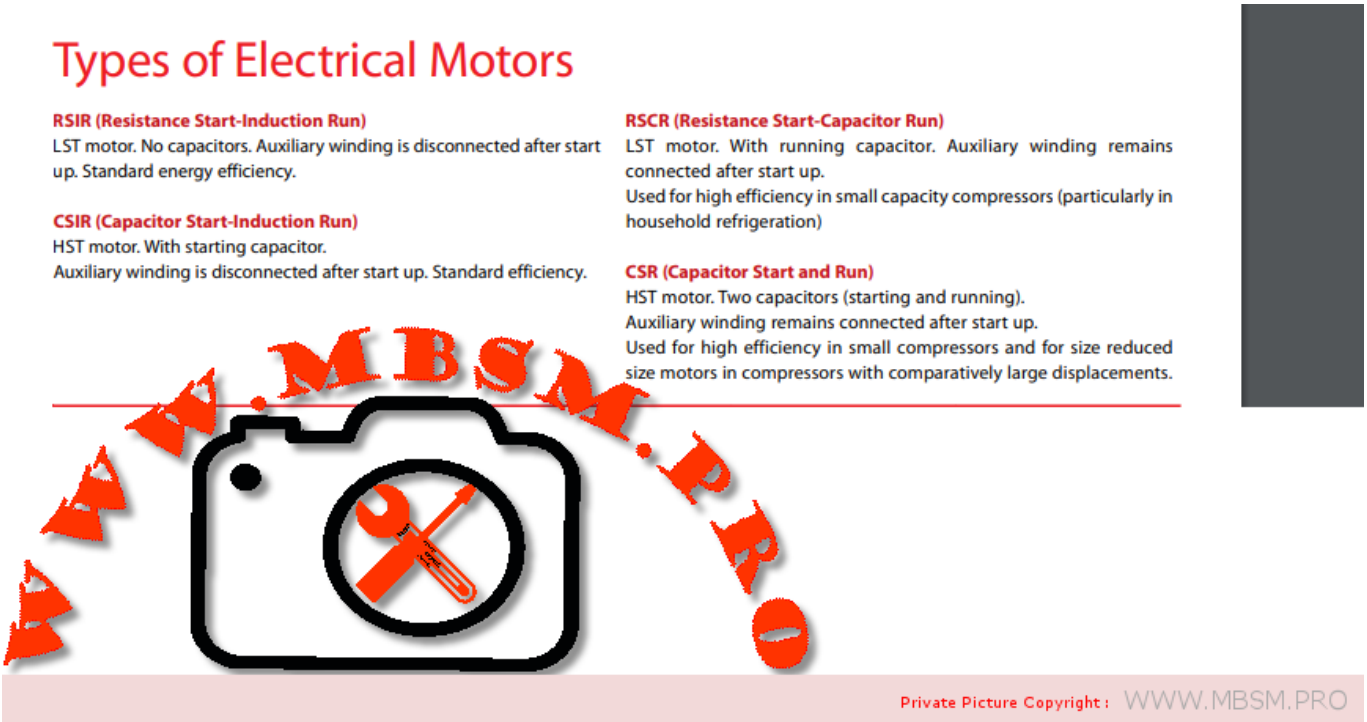
Types of Electrical Motors
RSIR (Resistance Start-Induction Run)
LST motor. No capacitors. Auxiliary winding is disconnected after start up. Standard energy efficiency.
CSIR (Capacitor Start-Induction Run)
HST motor. With starting capacitor.
Auxiliary winding is disconnected after start up. Standard efficiency.
RSCR (Resistance Start-Capacitor Run)
LST motor. With running capacitor. Auxiliary winding remains connected after start up.
Used for high efficiency in small capacity compressors (particularly in household refrigeration)
CSR (Capacitor Start and Run)
HST motor. Two capacitors (starting and running).
Auxiliary winding remains connected after start up.
Used for high efficiency in small compressors and for size reduced size motors in compressors with comparatively large displacements



Type of starting device
Current relay – (electromechanical). RSIR/CSIR motors and CSR low/medium-power motors with NTC (the NTC is connected in series with the starting capacitor and the main purpose is to reduce the current peaks in the relay contacts)
Potential relay – (electromechanical). CSR high-power motors.
PTC – (Positive Temperature Coefficient), the resistance increases

with the temperature. Device only with RSIR or RSCR motors in the (Small L, B), L and P ranges.
NTC – (Negative Temperature Coefficient), the resistance decreases with the temperature. Used in some CSR in order to reduce dimensions and components.

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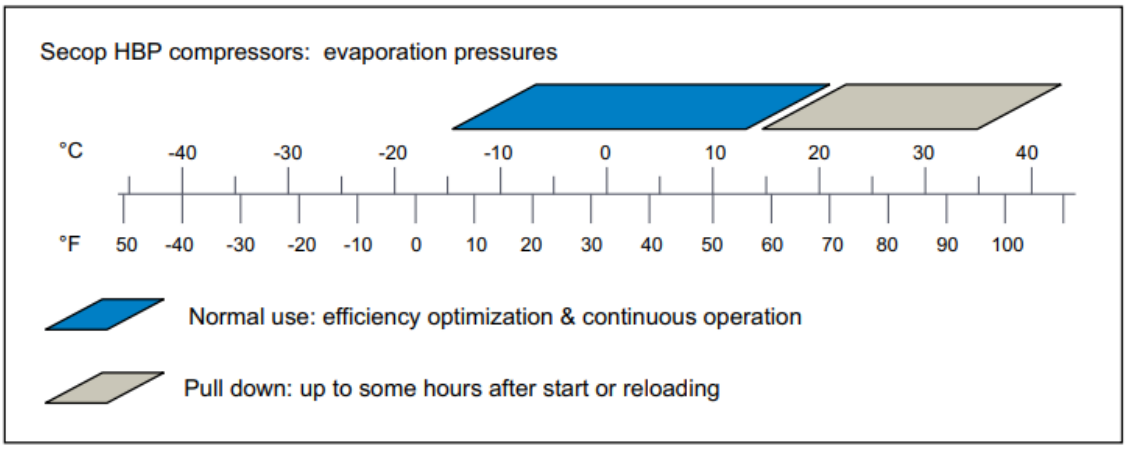
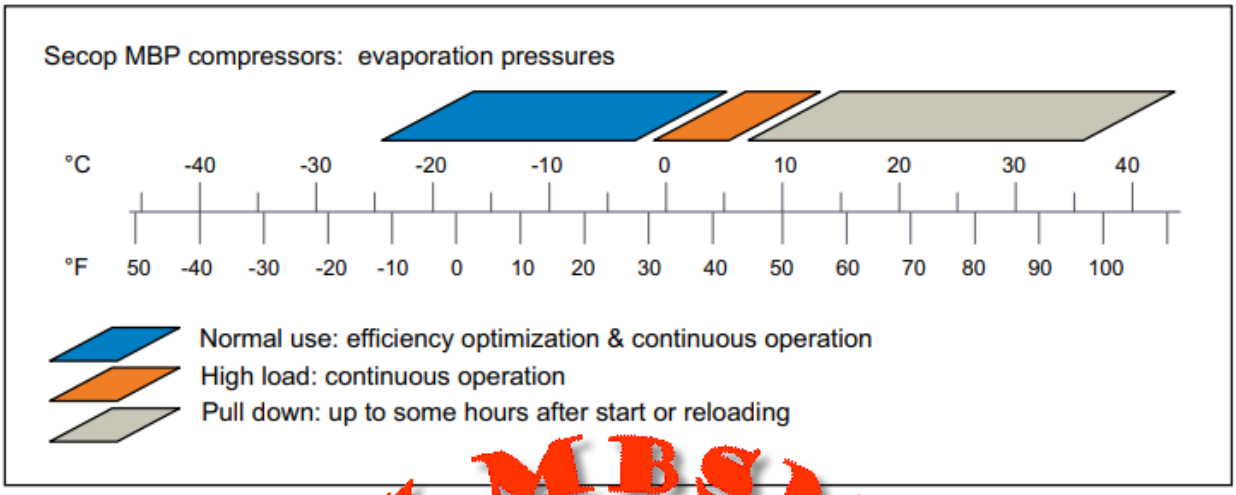
Type of torque
LST – Low Starting Torque – Systems with capillary tube or balanced pressures at start up.
HST – High Starting Torque – Systems with expansion valve or capillary tube, with unbalanced pressures at start up.

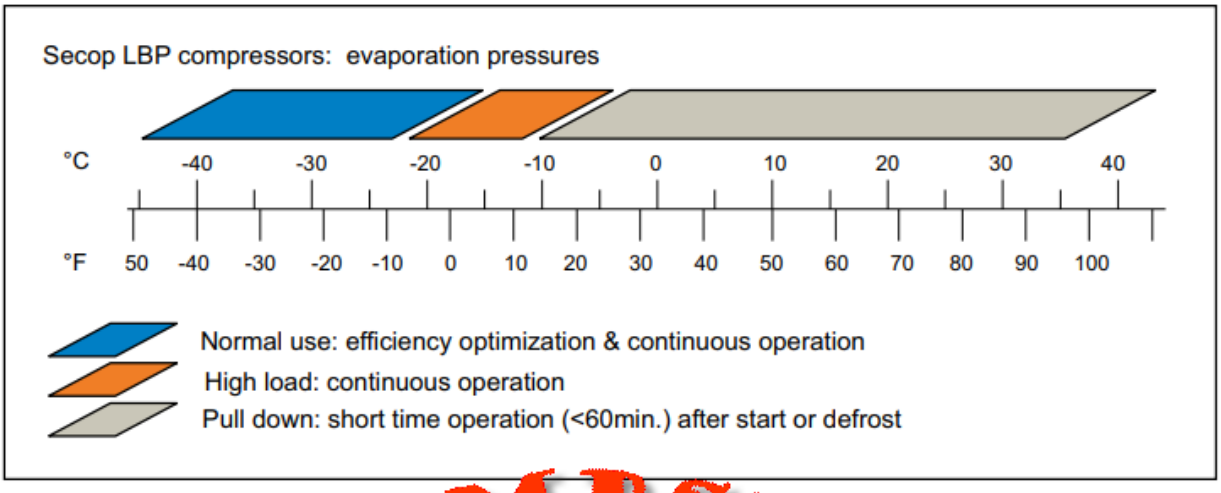
Type of torque

LST – Low Starting Torque – Systems with capillary tube or balanced pressures at start up.

HST – High Starting Torque – Systems with expansion valve or capillary tube, with unbalanced pressures at start up.







Compressor, Zanussi, HLY80AA, 1/7Hp, 220-240V 50Hz ~1, R600a, ZEM, Low Back Pressure, RSIR

Category: compressor
written by www.mbsm.pro | 18 January 2025

Technical Data Sheet
Compressor model HLY80AAa
Voltage 220-240V 50Hz ~1
Refrigerant R600a
APPLICATION COMPRESSOR MOTOR
Application Low Back Pressure Displacement 8,10 cm³ Nominal Power 1/7 hp

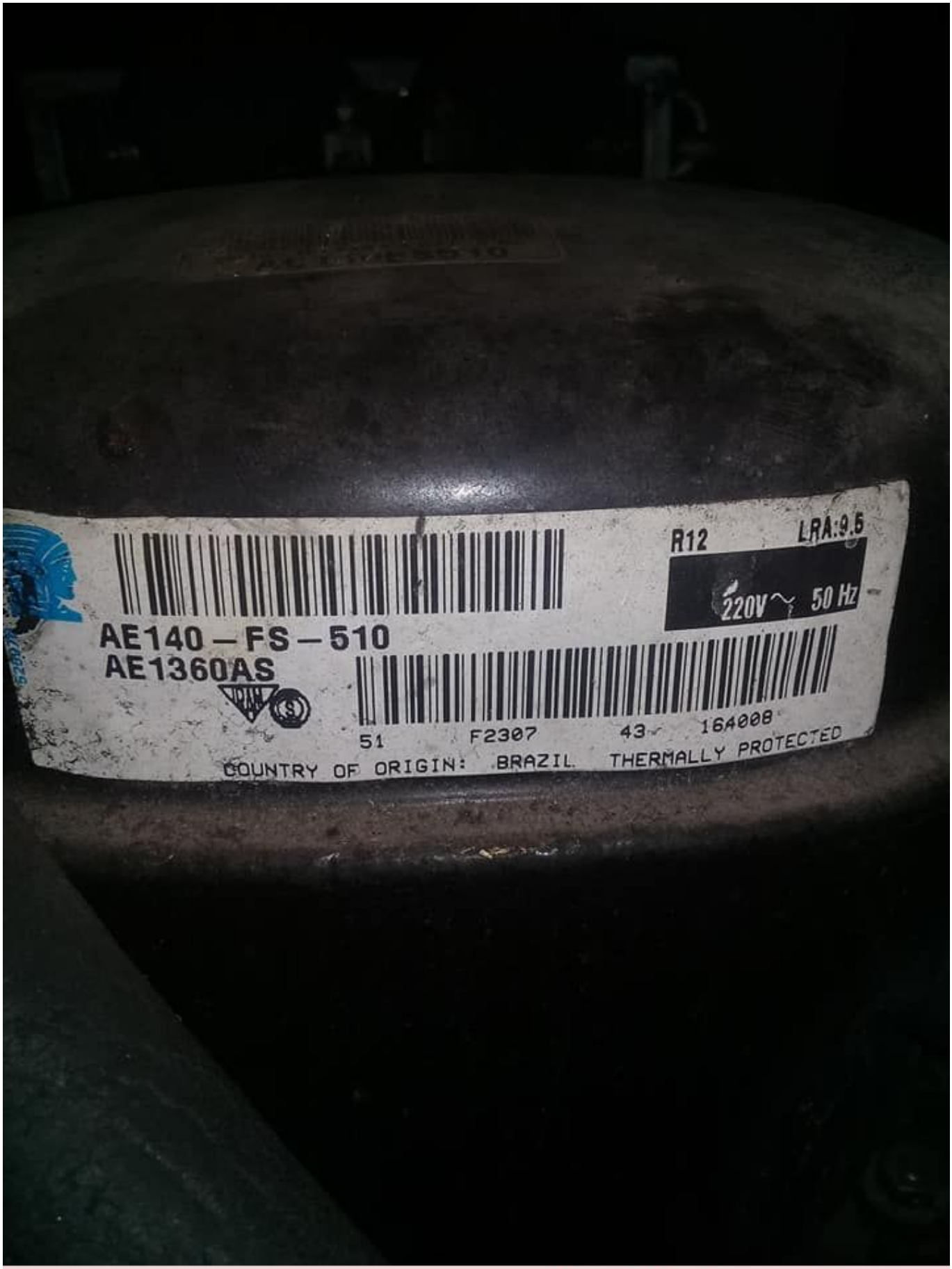
Refrigerant R600a Diameter 24,29 mm Voltage/Frequency 220-240V 50Hz
Evaporating Temp. -35,0 ºC to -10,0 ºC Stroke 17,47 mm Voltage range 187-264 V
Expansion Capillar Net Weight 9,45 Kg Type RSIR
Comp. Cooling Static Oil type ISO VG 10 MINER Phase number 1 PH
Max. ambient temp. 43,0 ºC Oil charge 205 cm³ Locked Rotor Amps (LRA) 8,60 A
Max. Cont. Current (MCC) 1,00 A
Main W. resist. at 25ºC 22,02 Ω
Start W. resist. at 25ºC 22,53 Ω
NOMINAL PERFORMANCE
ASHRAE CECOMAF
Cooling Capacity 113 kCal/h 99 W
COP 1,41 W/W 1,11 W/W
EER 1,22 kCal/Wh 0,96 kCal/Wh
Input Power 93 W 89 W
Current 0,62 A 0,60 A
TEST CYCLE CONDITIONS
ASHRAE CECOMAF
LBP (B) LBP (A)
Evaporating temp. -23,3 ºC -25,0 ºC
Condensing temp. 55,0 ºC 55,0 ºC
Liquid temp. 32,0 ºC 55,0 ºC
Ambient temp. 32,0 ºC 32,0 ºC
Suction temp. 32,0 ºC 32,0 ºC
Voltage/Frequency 220 V 50 Hz 220 V 50 Hz
ELECTRICAL COMPONENTS
Relay Option 1
Reference PTC K100
Voltage 200-240 V
Resistance 14.00 Ω
Protector Option 1 Option 2 Option 3 Option 4
Reference MSP318LZ 4TM189NFBYY T0462 AE37FJ
Current 5,90 A 5,50 A 6,20 A 5,90 A
Time check 7,5-14 seg 5-15 seg 7,5-14 seg 7,5-14 seg
Disc temp. (Open/Close) 120,00 / 61,00 ºC 120,00 / 61,00 ºC 110,00 / 62,00 ºC 115,00 / 62,00 ºC

smart

TECUMSEH EUROPE, COMPRESSEUR, REFROIDISSEUR, AE1360AS, 1/5 HP, AE140-FS-510, Lra 9.5, LBP, R12, 220-240V ~ 50Hz

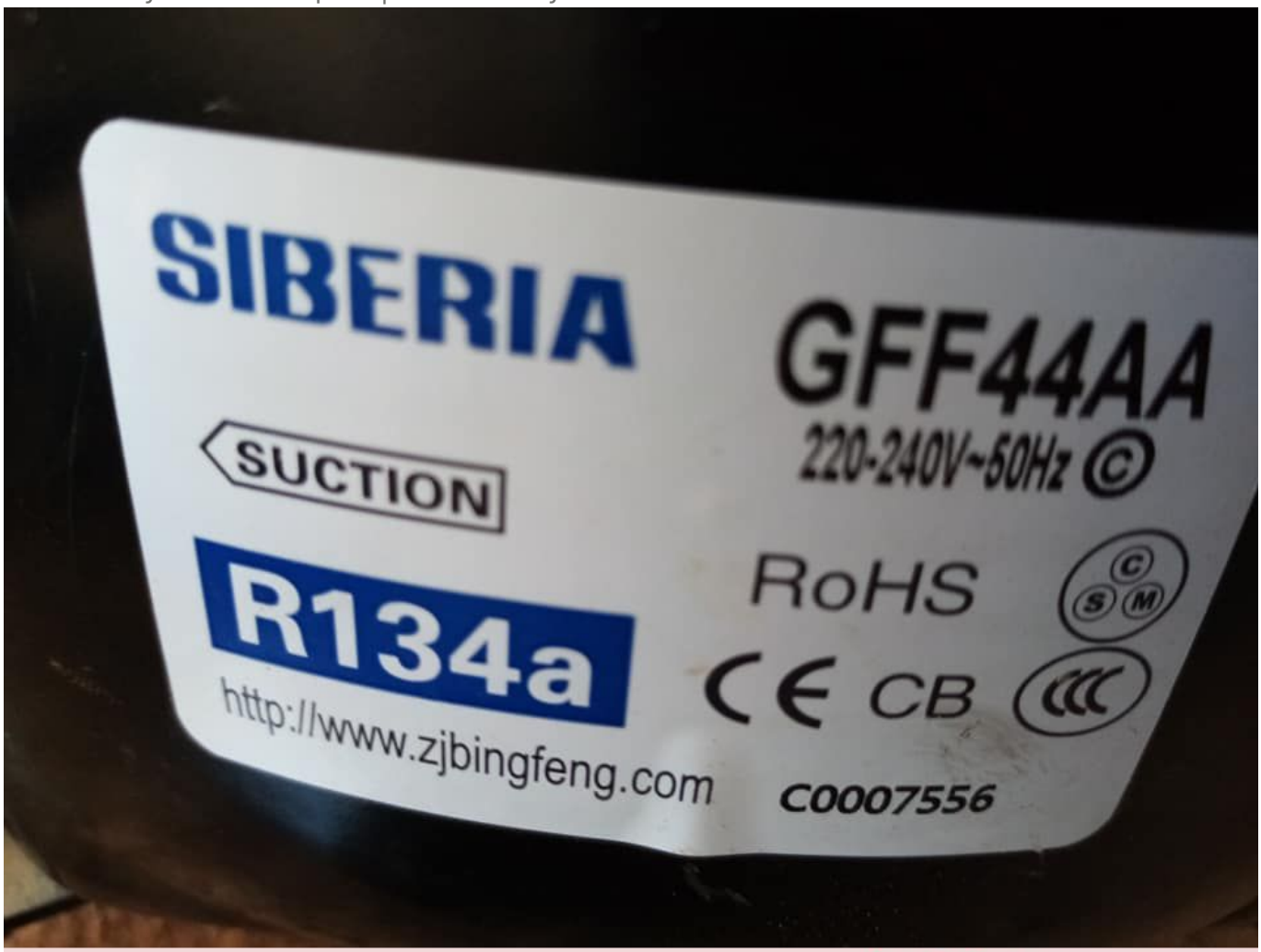
Category: compressor
written by www.mbsm.pro | 18 January 2025
Model:AE1360AS
Product Description
Type: Reciprocating
Application: LBP – Low Back Pressure
Refrigerant: R12
Voltage/Frequency: 220-240V ~ 50Hz
Product Specifications
Performance
Refrigeration Capacity Input Power Efficiency
EVAP
TEMP COND AMBIENT RETURN LIQUID
Condition TEMP TEMP GAS TEMP
Test
Voltage Btu/h kcal/h W W Btu/Wh kcal/Wh W/W
ASHRAE
240V ~
50HZ 560 141 164 157 3.57 .9 1.05
-23°C (-
10°F) 54°C (130°F) 32°C (90°F) 32°C (90°F) 32°C (90°F)
General
Evaporating Temp. Range: -34.4°C to -12.2°C (-30°F to 10°F)
Motor Torque:
Low Start Torque
(LST)
Compressor Cooling: Static
Mechanical
Weight: 10.231
Weight Unit of Measure: KG
Displacement (cc): 7.55
Oil Type: N/A
Viscosity (cSt): N/A
Oil Charge (cc): N/A
Electrical
Voltage Range (50 Hz): 198-253
Voltage Range (60 Hz): N/A
Locked Rotor Amps (LRA): 11
Rated Load Amps (RLA 50 Hz): 1.12
Rated Load Amps (RLA 60 Hz): N/A
Max. Continuous Current (MCC in Amps): N/A

Motor Resistance (Ohm) – Main: 11.06
Motor Resistance (Ohm) – Start: 44.87
Motor Type: RSIR
Overload Type: N/A
Relay Type: Current Relay



refrigerator compressor, LBP, 1/6Hp, GFF44AA, GFF75AA, R134a, 220-240V~50Hz , RSIR, 130W , 0.65A, Cop: 1.31, Oil charge: 200ml, Compresseurs hermétiques Siberia

Category: compressor
written by www.mbsm.pro | 18 January 2025



Modèle	Puissance Hp	Déplacement	Capacité de refroidissement	Type de moteur	La puissance d'entrée	Courant évalué	FLIC
GFM44AA	1/6	4.6	120	RSIR	100	0,70	1,20
GFM53AA	1/6 +	5,3	145	RSIR	114	0,88	1,27
GFM57AA	1/5	5,7	165	RSIR	132	0,97	1,25
GFM75AA	1/4 +	7,5	215	RSIR	159	1,20	1,35
GFM10AA	1/3 +	10,0	295	RSIR	220	1,55	1,34
GFM12AA	1 / 2-	12,0	330	RSIR	235	1,85	1,40
GFM12AA_S	1 / 2-	12,0	330	RSIR	235	1,85	1,40

Série F (F) 220-240V / 50Hz

GFF44AA	1/6	4.6	130	RSIR / RSCR	99/93	0,65 / 0,53	1,31 / 1,40
GFF57AA	1/5	5,7	165	RSIR / RSCR	115/110	0,77 / 0,57	1,43 / 1,50
GFF66AA	1/4	6,6	195	RSIR / RSCR	143/129	0,92 / 0,74	1,36 / 1,51
GFF75AA	1/4 +	7,5	215	RSIR / RSCR	156/147	1,15 / 0,83	1,38 / 1,46
GFF86AA	1/3	8,6	250	RSIR / RSCR	179/164	1,24 / 0,90	1,40 / 1,52
GFF93AA	1/3 +	9,3	270	RSIR / RSCR	185/175	1,25 / 0,95	1,46 / 1,54

Compresseur haute efficacité série F (T) 220-240V / 50Hz

GFT36AA	1/7	3,6	110	RSCR	68	0,32	1,62
GFT44AA	1/6	4.4	130	RSCR	81	0,43	1,60
GFT53AA	1 / 5-	5,3	145	RSCR	96	0,53	1,50
GFT57AA	1/5	5,7	165/168	RSCR	104/98	0,55 / 0,49	1,60 / 1,70
GFT61AA	1/5 +	6.1	182	RSCR	107	0,53	1,70
GFT66AA	1/4	6,6	195	RSCR	115/113	0,58 / 0,55	1,68 / 1,72
GFT75AA	1/4 +	7,5	220	RSCR	129	0,69	1,70
GFT86AA	1/3	8,6	250	RSCR	148	0,73	1,70
GFT93AA	1/3 +	9,3	270	RSCR	166	0,84	1,65

Série F 115V / 60Hz

GFM44AD	1/6 +	4.6	145	RSIR	111	1,62	1,30
GFM53AD	1/4	5,3	185	RSIR	131	1,75	1,30
GFM57AD	1/4	5,7	195	RSIR	138	1,85	1,30
GFM61AD	1/4 +	6.1	210	RSIR	168/150	2,75 / 1,90	1,25 / 1,40
GFR40AD	1/6	3,6	120	RSCR	84,6	7/8	1,42
GFR57AD	1/4	5,7	195	RSCR	116	1,2 / 7	1,55
GFM93AD	1/4	9,3	305	RSIR	218	3.2	1,40

Série F 200-220V / 50Hz

GFF53AT	1/6 +	5,3	150	RSCR	106	0,67	1,42
GFF57AT	1/5	5,7	165	RSCR	118	0,86	1,40
GFF66AT	1/4	6,6	196	RSCR	138	1,02	1,42
GFF75AT	1/4 +	7,5	218	RSCR	147	1,07	1,48
GFF86AT	1/3	8,6	250	RSCR	168	1.14	1,49
GFF93AT	1/3 +	9,3	275	RSCR	185	1,23	1,49

Série F 100V-50 / 60Hz

GFF66AJ	1/4	6,6	195/233	RSCR	135/152	2,15 / 1,95	1,44 / 1,53
GFF93AJ	1/3	9,3	270/305	RSCR	190/205	2,95 / 2,58	1,42 / 1,49

Compresseur série F M / HBP R134a

220-240V 50 / 60Hz

GFL60AG_AL	3/4	5,3	550/650	CSIR	245/265	1,88 / 1,69	2,24 / 2,45

220 à 240 V 50 Hz

GFL80AA	1	7,5	720	CSIR	317	1,96	2,27
GFL10AA	1.2	9,3	880	CSIR	430	2,50	2.0

Compresseur série F LBP R600a

Série F (M / F) 220-240V / 50Hz

BFM86AA	1/6 +	8,6	142	RSIR	101	0,82	1,40
BFF86AA	1/6	8,6	142	RSIR / RSCR	93/90	0,65 / 0,51	1,53 / 1,58
BFM93AA	1/5	9,3	155	RSIR	108	0,85	1,43
BFF93AA	1/5	9,3	160	RSIR / RSCR	103/98	0,73 / 0,58	1,55 / 1,63
BFM10AA	1/5 +	10,0	168	RSIR	122	1,01	1,38
BFF11AA	1/4	10,5	185	RSIR	121	0,70	1,45
BFM12AA	1/4 +	12,0	202	RSIR	144	1.10	1,40
BFF12AA	1/4 +	12,0	202	RSIR / RSCR	130/123	1,04 / 0,75	1,55 / 1,64

Compresseur haute efficacité série F (T) 220-240V / 50Hz

BFT57AA	1 / 7-	5,7	95	RSCR	53/50	0,28 / 0,24	1,80 / 1,90
BFT75AA	1/6	7,5	130	RSCR	75/72	0,35	1,73 / 1,80
BFT86AA	1/5	8,6	142	RSCR	82/74	0,43 / 0,36	1,73 / 1,92
BFT93AA	1/5	9,3	155	RSCR	82	0,50	1,90
BFT10AA	1/5 +	10,0	175	RSCR	100/92	0,60 / 0,43	1,72 / 1,90
BFT11AA	1/4	10,0	180	RSCR	100	0,54	1,80
BFT12AA	1 / 4-	11,5	200/210	RSCR	116/114	0,54 / 0,52	1,72 / 1,86

Série F 200-220V / 50Hz

BFF75AT	1/6	7,5	130	RSCR	80	0,46	1,63
BFF86AT	1/5	8,6	142	RSCR	91,5	0,65	1,55
BFM93AT	1/5	9,3	158	RSIR	112	0,93	1,41
BFF93AT	1/5	9,3	160	RSCR	100	0,66	1,60
BFF11AT	1/4	11	175	RSCR	110	0,76	1,60
BFT12AT	1/4	11,5	200	RSCR	130	1.0	1,50

Série F 115 / 60Hz

BFR57AD	1/6	5,7	120	RSCR	75	0,73	1,60
BFR75AD	1 / 5-	7,5	156	RSCR	92	0,90	1,70
BFM10AD	2/7	10,0	200	RSCR	133	1,55	1,50
BFR10AD	2/7	10,0	195	RSCR	116	1,32	1,65
BFM12AD	1/3	11,0	230	RSCR	153	1,65	1,50

Compresseur série F LBP R290a

220 à 240 V / 50 Hz

PFT61AA	3/8	6.1	285	RSCR	183	1,55
PFT66AA	3/8	6,6	310	RSCR	200	1,56
PFT66AA ©	3/8	6,6	310	RSCR	190	1,65
PFT75AA	1 / 2-	7,5	350	RSCR	216	1,62
PFT75AA ©	1 / 2-	7,5	350	RSCR	206	1,70
PFT86AA	1/2	8,6	388	RSCR	258	1,50
PFT86AA ©	1/2	8,6	421	RSCR	263	1,60
PFT93AA ©	3/5	9,3	455	RSCR	284	1,60

Compresseur série F L / MBP R290

220 à 240 V / 50 Hz

PFL57AA	1/3	5,7	255/490	CSIR	170/235	1,50 / 2,09
PFL75AA	1 / 2-	7,5	350/657	CSIR	248/324	1,41 / 2,03

: GFF44AA	Model: GFF44AA
: 4.4cm	Dispi: 4.4cm
: RSIR/RSCR	Motor Type: RSIR/RSCR
: 130W	Cooling Capacity: 130W
: 99/93W	Input power: 99/93W
: 0.65/0.53A	Rated Current: 0.65/0.53A
: 1.31/1.40	Cop: 1.31/1.40
: 200	Oil Charge: 200

Product Detailed

1.pass CB,3C,CE,RoHS

2.excellent start performance

3.strong ability of cooled ambient

4.low noise,low power consumption

R134a Fluorine-free Freezing Compressor LBP

Model	Displ.(cm3)	Power HP	Motor Type	Volt.-Frequency	Cooling Capacity	Input Power	Rated Current(A)	COP(W/W)	Oil Charge Volume
GFF44AA	4.4	1/6	RSIR/RSCR	220-240V~50HZ	130	99/93	0.65/0.53	1.31/1.40	200
GFF57AA	5.7	1/5	RSIR/RSCR	220-240V~50HZ	166	122/112	0.86/0.62	1.36/1.48	200
GFF66AA	6.6	1/4	RSIR/RSCR	220-240V~50HZ	195	143/132	0.92/0.74	1.36/1.48	200
GFF75AA	7.5	+1/4	RSIR/RSCR	220-240V~50HZ	215	156/147	1.15/0.83	1.38/1.46	200
GFF86AA	8.6	1/3	RSIR/RSCR	220-240V~50HZ	250	156/148	1.24/0.90	1.40/1.52	200
GFF93AA	9.3	1/3	RSIR/RSCR	220-240V~50HZ	270	156/149	1.25/0.95	1.46/1.54	230

Test Conditions(ASHRAE)

Evaporating temperature -23.3ºC

Condensing temperature 54.4ºC

Subcooling temperature 32.2ºC

Suction temperature 32.2ºC

Ambient temperature 32.2ºC

About Advantages of Model GFF44AA, 1/6HP1.high efficiency, energy-saving2.R134a fluorine- free compressor3.adjustable low-carbon emission4.excellent cooling speed, large capacity

About More Application of Model GFF44AA

1.fit for small ice machine(maker)

2.suitable for home fridge or freezer

3.ice cream display, showcase, wine display, and other freezing equipments

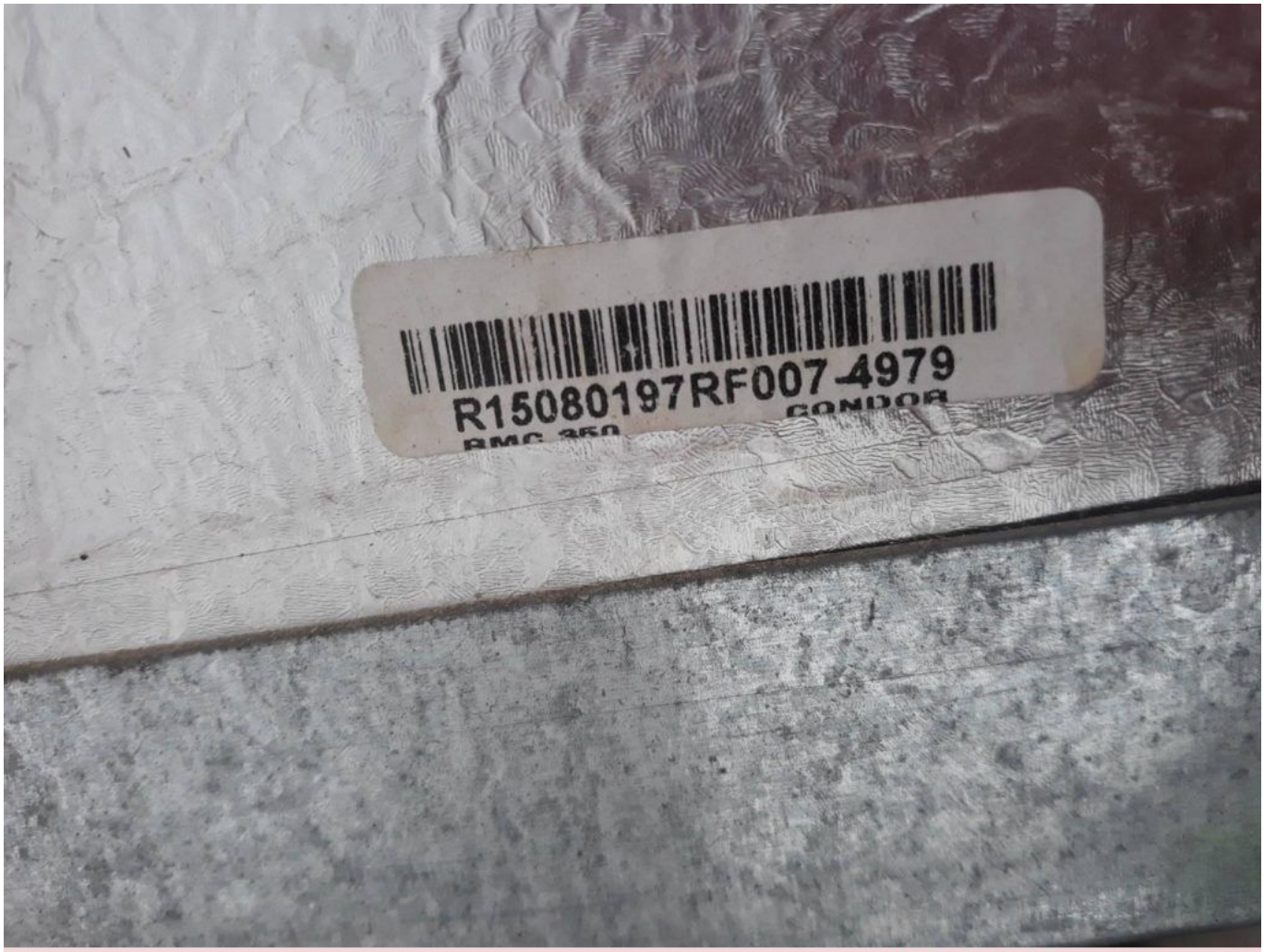
About Compressor Spare Parts

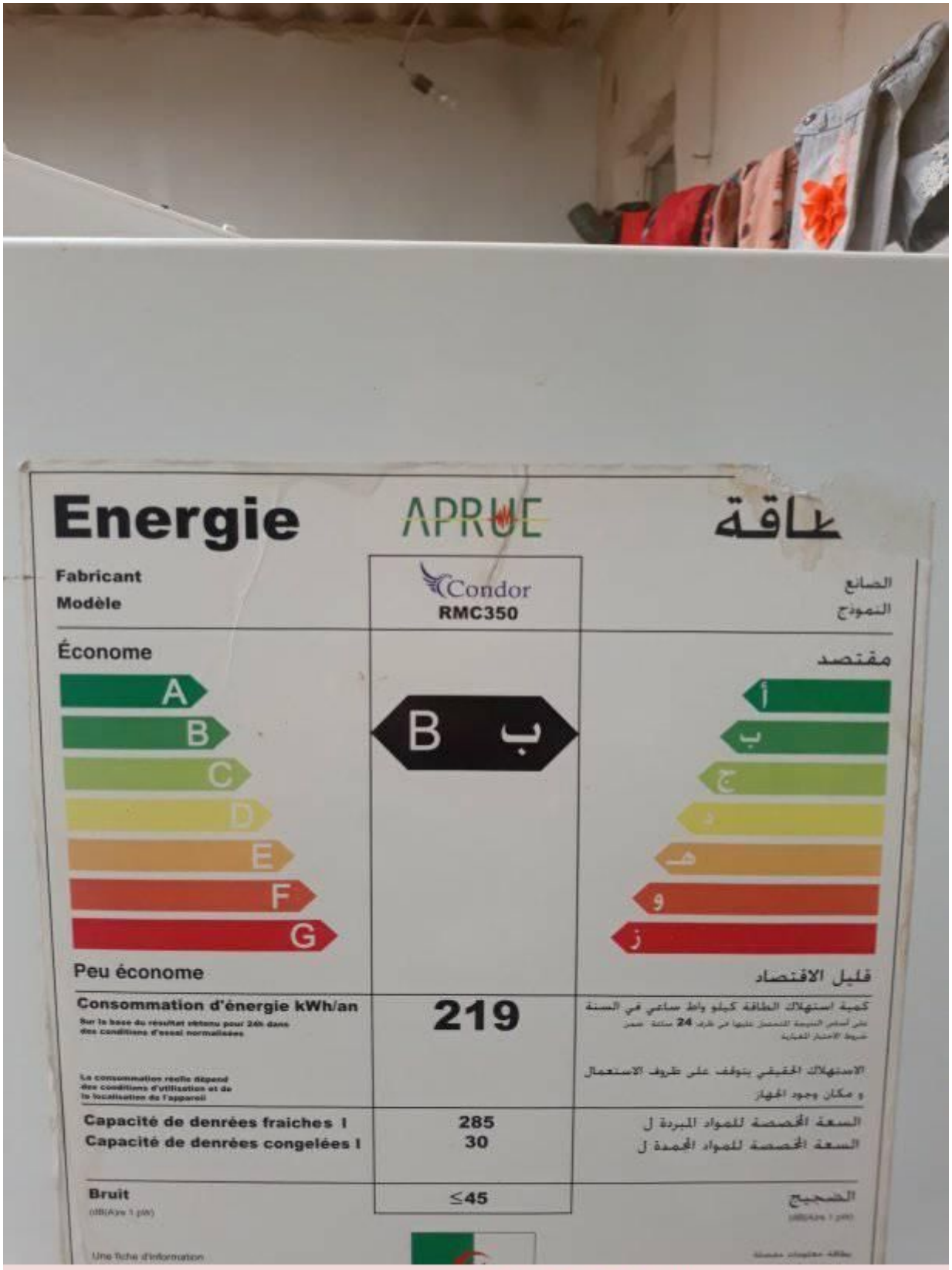
1. four rubber sleeve
2. one PTC starter
3. one capacitor
4. one relay cover
5. one overload protector

6. four shockproof rubber washer

- GTM 45 AA 1/6 130 watts R 134 A
- GFF 57 CR 1/5 166 watts R 134 A
- GFF 66 AA 1/4 195 watts R 134 A
- GFF 75 AA 1/4 + 215 watts R 134 A
- BFF 12 AA 1/4 202 watts R 600 A

MODÈLE	PUISSANCE HP	TENSION	DÉPLACEMENT (CM^3)	CAPACITÉ DE REFROIDISSEMENT □W / CAL□	PUISSANCE D'ENTREE □W□	TYPE DE MOTEUR	COPW / W	CHARGE D'HUILE (ML)
GFF44AA1/6 HP		220 ~ 240V-50Hz	4.6	130/112	99/93	RSIR / RSCR	1,31 / / 1,40	1,31 / 1,40
GFF57AA1 / 5Hp		220 ~ 240V-50Hz	5,7	166/143	122/112	RSIR / RSCR	1,36 / / 1,48	200
GFF66AA1 / 4Hp		220 ~ 240V-50Hz	6,6	195/170	143/132	RSIR / RSCR	1,36 / / 1,48	200
GFF75AA1/4 + Hp		220 ~ 240V-50Hz	7,5	215/185	156/147	RSIR / RSCR	1,38 / / 1,46	200
BFF12AA1 / 4Hp		220 ~ 240V-50Hz	12,0	202/174	130/123	RSIR / RSCR	1,55 / / 1,64	200





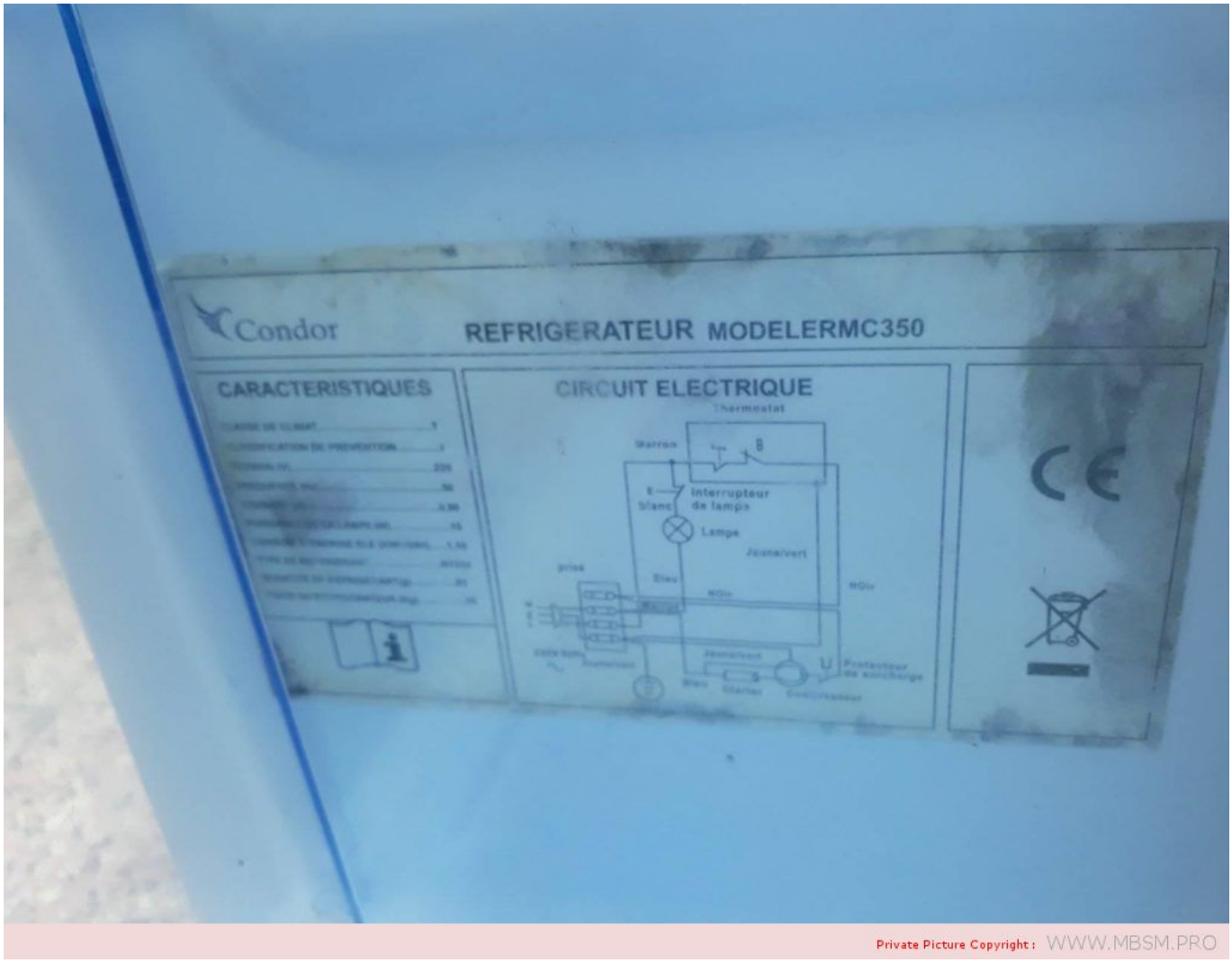
Energie

APRUE

طاقة

Fabricant	Condor	الصانع
Modèle	**RMC350**	النموذج
Économe		مقتصد
	B ب	
Peu économe		قليل الاقتصاد
Consommation d'énergie kWh/an Sur la base du résultat obtenu pour 24h dans des conditions d'essai normalisées	**219**	كمية استهلاك الطاقة كيلو واط ساعي في السنة على أساس النتيجة المتحصل عليها في مدة 24 ساعة ضمن شروط الاختبار المعيارية
La consommation réelle dépend des conditions d'utilisation et de la localisation de l'appareil		الاستهلاك الحقيقي يتوقف على ظروف الاستعمال و مكان وجود الجهاز
Capacité de denrées fraiches l	**285**	السعة المخصصة للمواد المبردة ل
Capacité de denrées congelées l	**30**	السعة المخصصة للمواد المجمدة ل
Bruit (dB(A)re 1 pW)	≤45	الضجيج (dB(A)re 1 pW)

Une fiche d'information



3HP , 2CC-3.2 , Bitzer ,Semi hermetic ,Refrigeration ,Compressor ,for cold storage

Category: Technologie,Tester ok
written by www.mbsm.pro | 18 January 2025
3HP , 2CC-3.2 , Bitzer ,Semi hermetic ,Refrigeration ,Compressor ,for cold storage

High Efficiency Refrigerator , Compressor , Lbp ,QD65H ,1/5HP ,60Hz ,6.5CC, 185W ,R134a ,LBP Piston

Reciprocationg

Category: Technologie,Tester ok
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High Efficiency Refrigerator , Compressor , Lbp ,QD65H ,1/5HP 60Hz 6.5CC 185W