

NF7FK Standard Compressor R134a 115-127V 60Hz

General

Code number	105G5728
Approvals	UL984
Compressors on pallet	80

Application

Application	LBP/MBP			
	Hz	50	60	
Frequency	Hz	50	60	
Evaporating temperature	°F	-	-31 to 45	
Voltage range	V	-	95 - 135	
Max. condensing temperature continuous (short)	°F	-	140 (158)	
Max. winding temperature continuous (short)	°F	-	257 (275)	

Cooling requirements

Frequency	Hz	50			60		
		LBP	MBP	HBP	LBP	MBP	HBP
90°F		-	-	-	S	S	-
100°F		-	-	-	S	S	-
110°F		-	-	-	F ₁	F ₁	-

Remarks on application: In capillary tube systems where non-equalized pressures may occur at compressor start, or in areas with short power supply drop-outs, a starting capacitor can be used for ensuring a successful start (CSIR).

Motor

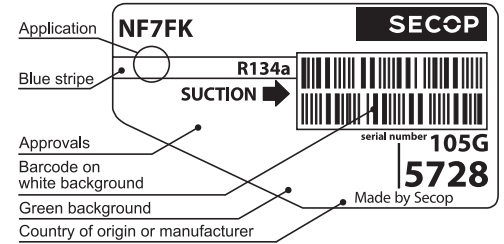
Motor type	RSIR/CSIR		
LRA (rated after 4 sec. UL984), HST LST	A	-	29.4
Cut in Current, HST LST	A	-	29.4
Resistance, main start winding (77°F)	Ω	2.0	9.1

Design

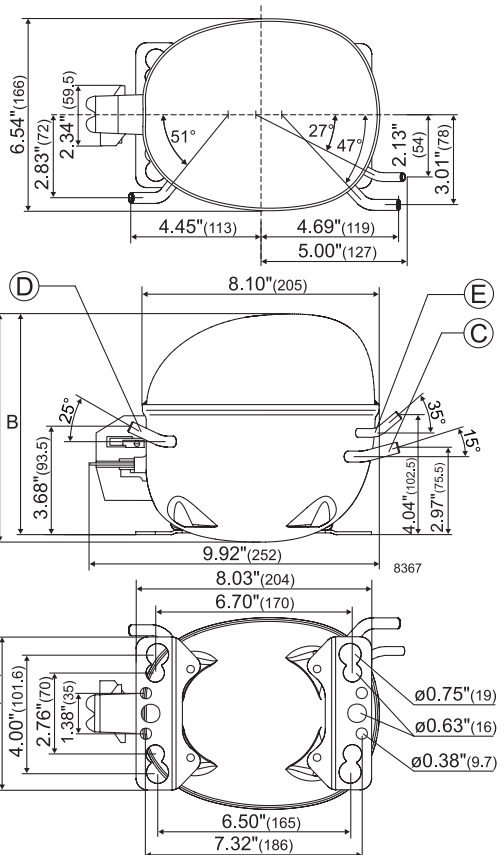
Displacement	cu.in	0.44
Oil quantity (type)	fl.oz.	10.8 (polyolester)
Maximum refrigerant charge	oz.	14.0
Free gas volume in compressor	fl.oz.	79.7
Weight without electrical equipment	lbs.	23.0

Dimensions

Height	inch	A	8.00
		B	7.76
		B1	-
		B2	-
Suction connector	location, I.D. in. angle	C	0.320-0.327 15°
	material comment	Copper Rubber plug	
Process connector	location, I.D. in. angle	D	0.252-0.259 25°
	material comment	Copper Rubber plug	
Discharge connector	location, I.D. in. angle	E	0.252-0.259 35°
	material comment	Copper Rubber plug	
Oil cooler connector	location, I.D. in. angle	F	-
Remarks:			



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary
- SG = Suction gas cooling normally sufficient
- = not applicable in this area



ASHRAE LBP

115V, 60Hz, fan cooling F₁

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	32	40	45	50	59	68
Capacity in BTU/h			401	600	758	833	1112	1451	1604	1861	2355	2463	2946	3282			
Power cons. in W			130	168	193	204	238	271	285	303	336	344	369	385			
Current cons. in A			2.52	2.69	2.81	2.87	3.05	3.25	3.34	3.45	3.66	3.72	3.88	4.00			
EER in BTU/Wh			3.08	3.57	3.93	4.09	4.68	5.35	5.63	6.13	7.01	7.17	7.99	8.52			

ASHRAE MBP

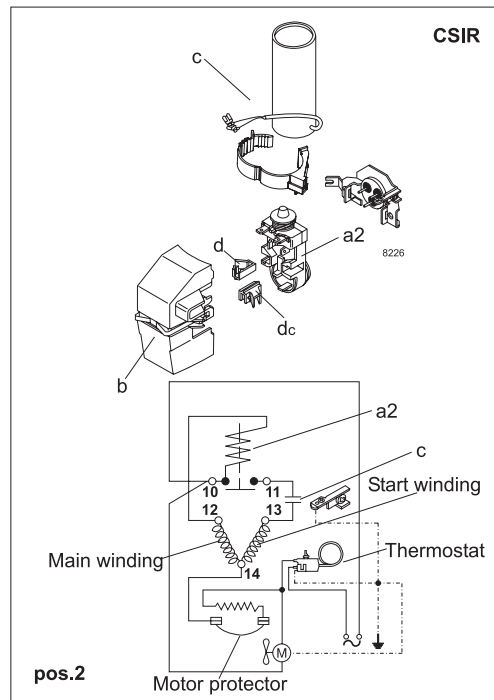
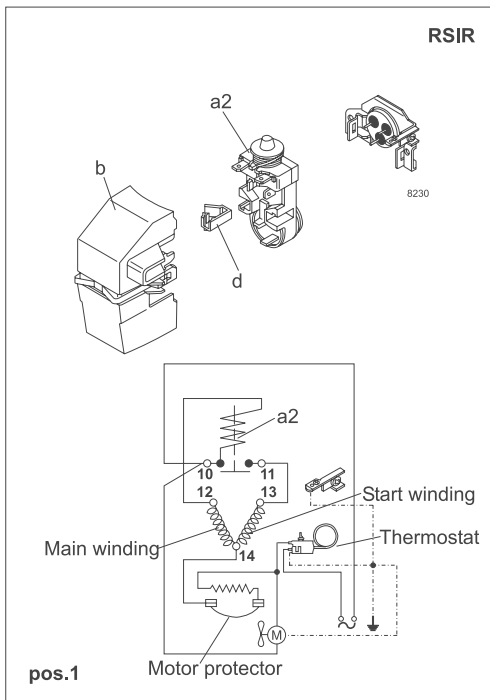
115V, 60Hz, fan cooling F₁

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	32	40	45	50	59	68
Capacity in BTU/h			357	533	674	740	988	1288	1194	1651	2089	2194	2611	2907			
Power cons. in W			130	168	193	204	238	271	284	303	336	342	369	385			
Current cons. in A			2.52	2.69	2.81	2.87	3.05	3.25	3.33	3.45	3.66	3.71	3.88	4.00			
EER in BTU/Wh			2.74	3.18	3.49	3.64	4.16	4.76	5.05	5.44	6.22	6.41	7.08	7.55			

EN 12900 Household (CECOMAF)

115V, 60Hz, fan cooling F₁

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	32	40	45	50	59	68
Capacity in W			95	142	180	198	264	344	380	441	557	583	696	775			
Power cons. in W			130	168	193	204	238	271	285	303	336	344	369	385			
Current cons. in A			2.52	2.69	2.81	2.87	3.05	3.25	3.34	3.45	3.66	3.72	3.88	4.00			
COP in W/W			0.73	0.84	0.93	0.97	1.11	1.26	1.33	1.45	1.65	1.69	1.88	2.00			



Accessories for	NF7FK	Figure	Code number
Starting relay	1/4 in. spade connect.	a2	117U4131
Protector 3/4 in.	Texas Instruments	(pos.1)	MRT30AEZ-6
Starting relay	1/4 in. spade connect.	a2	117U4132
Protector 3/4 in.	Texas Instruments	(pos.2)	MRT30AEZ-6
Start. capacitor 320 µF	1/4 in. spade connect.	c	117U5022
Cord relief for capacitor		dc	117U0349
Cord relief		d	117U0349
Cover		b	117U1021

Test conditions	ASHRAE LBP	ASHRAE MBP	EN 12900/CECOMAF
Condensing temp.	130°F	130°F	131°F
Ambient temp.	90°F	95°F	90°F
Suction gas temp.	90°F	95°F	90°F
Liquid temperature	90°F	115°F	131°F

Mounting accessories		Code number
Bolt joint for one comp.	Ø: 5/8 in.	118-1917
Bolt joint in quantities	Ø: 5/8 in.	118-1918
Snap-on in quantities	Ø: 5/8 in.	118-1919

Nidec GA Compressors accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Nidec GA Compressors reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without consequential changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Nidec Global Appliance Germany GmbH. All rights reserved. www.secop.com