

NTY10FK

High Energy-optimized Compressor

R134a

115V 60Hz

Data Sheet (Replaces CH.43.C1.22)

General

Compressor		NTY10FK
Connector-material	Sealing	Code number
Copper-plated steel	Aluminium caps	
Copper-plated steel	Rubber plugs	105G5922
Copper	Rubber plugs	

Application

Application		LBP
Evaporating temperature range	°F (°C)	-31 to 14 (-35 to -10)
Voltage range	V/Hz	103 - 127 /60
Motor type		RSCR*
Max. ambient temperature	°F (°C)	110 (43)
Comp. cooling at max. ambient temperature	110°F (43°C)	F ₁

*run capacitor compulsory

Design

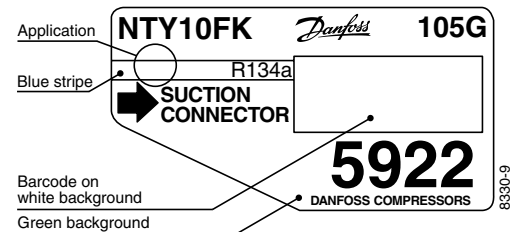
Displacement	cu.in. (cm ³)	0.62 (10.09)
Oil quantity	fl.oz. (cm ³)	9.9 (290)
Maximum refrigerant charge	oz. (g)	14.0 (400)
Free gas vol. in compressor housing	fl.oz. (cm ³)	79.7 (2360)
Weight without electrical equipment	lbs. (kg)	23.8 (10.8)

Motor

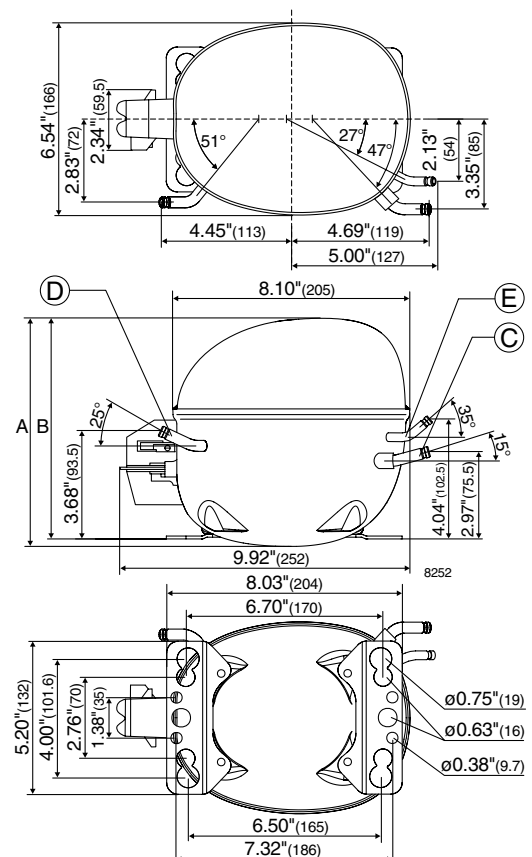
Motor size	watt	285
LRA (rated after 4 sec. UL984) LST	A	20.3
Cut-in current LST	A	30.7
Resistance, main and start winding (77°F)	Ω	1.8/3.1
Approvals		UL984/CSA-C22.2

Dimensions

Height	in. (mm)	A	8.00 (203)
		B	7.76 (197)
Suction connector	location/I.D. in. (mm)	C	0.320-0.327 (8.2±0.09)
Process connector	location/I.D. in. (mm)	D	0.252-0.259 (6.5±0.09)
Discharge connector	location/I.D. in. (mm)	E	0.252-0.259 (6.5±0.09)
Compressors on a pallet	pcs.		80



- 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



Capacity (ASHRAE)
Btu/h

Comp.\°F	-30	-20	-13	-10	0	10	14
Comp.\°C	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-10
NTY10FK	635	873	1082	1183	1581	2085	2321

Capacity (EN 12900/CECOMAF)
watt

Comp.\°C	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-10
Comp.\°F	-30	-20	-13	-10	0	10	14
NTY10FK	152	209	259	283	378	499	555

Power consumption
watt

Comp.\°F	-30	-20	-13	-10	0	10	14
Comp.\°C	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-10
NTY10FK	164	200	226	238	281	331	354

Current consumption
A

Comp.\°F	-30	-20	-13	-10	0	10	14
Comp.\°C	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-10
NTY10FK	1.89	2.12	2.31	2.41	2.78	3.21	3.41

EER (ASHRAE)
Btu/Wh

Comp.\°F	-30	-20	-13	-10	0	10	14
Comp.\°C	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-10
NTY10FK	3.87	4.36	4.78	4.97	5.63	6.30	6.56

COP (EN 12900/CECOMAF)
W/W

Comp.\°C	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-10
Comp.\°F	-30	-20	-13	-10	0	10	14
NTY10FK	0.93	1.05	1.14	1.19	1.35	1.51	1.57

Test conditions	ASHRAE	EN 12900/CECOMAF
Condensing temperature	130°F (54,4°C)	55°C (131°F)
Ambient and suction gas temp.	90°F (32°C)	32°C (90°F)
Liquid temperature	90°F (32°C)	55°C (131°F)
Static cooling, with RC 15 µF, 115V 60Hz, PTC consumption incl.		

Accessories

Devices	Fig.	NTY10FK
PTC starting device (Texas Instr.) with reduced loss of energy	a1	117U6102
		TI 8EA 4B3
PTC starting device (Siemens) with reduced loss of energy	a1 (alternative)	117U6106
		J506-A120-A320
Cover	b	117U1026
Run capacitor 15 µF (compulsory)	e	117-7118
Protector (Texas Instruments)	f	117U3311
		TI-4TM805KDBZZ-53
Mounting accessories	Ø in. (mm)	
Bolt joint for one compressor	5/8 (16)	118-1946
Bolt joint for one compressor	3/4 (19)	118-1949
Snap-on for one compressor	5/8 (16)	118-1947

