

# TL4G Universal Compressor R134a 220-240V 50Hz

Data Sheet (Replaces CG.42.A1.02)

## General

Compressor	<b>TL4G</b>
Code number (small baseplate)	102G4452
Code number (small baseplate, UL-recognized)	102G4453
Code number (large baseplate, UL-recognized)	102G4454

## Application

Application		LBP/HBP
Evaporating temperature range	°C	-30 to 15
Voltage range	V/Hz	LBP: 187 - 254 /50
		LBP: 198 - 254 /60
		HBP: 198 - 254 /50
Motor type		RSIR/CSIR
Max. ambient temperature	°C	43
Comp. cooling at ambient temp.	32°C	LBP: S
		HBP: F <sub>2</sub>
	38°C	LBP: S
		HBP: F <sub>2</sub>
43°C	LBP: S	
	HBP: F <sub>2</sub>	

## Design

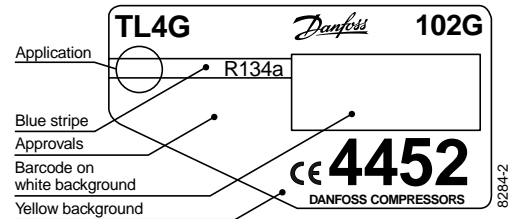
Displacement	cm <sup>3</sup>	3.86
Oil quantity	cm <sup>3</sup>	280
Maximum refrigerant charge	g	400
Free gas vol. in compressor	cm <sup>3</sup>	1690
Weight without electrical equipment	kg	7.5

## Motor

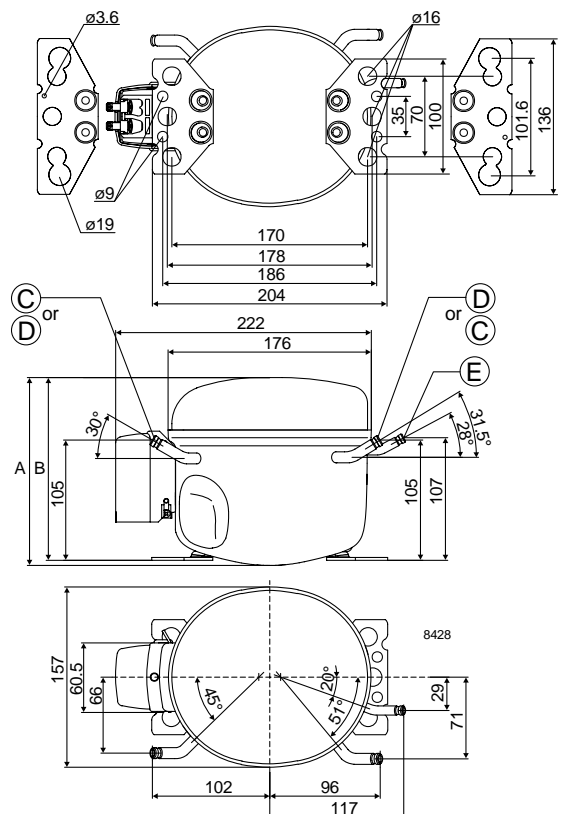
Motor size	watt	110
LRA (rated after 4 sec. UL984) LST/HST	A	4.3/5.1
Cut-in current LST/HST	A	8.6/5.1
Resistance, main and start winding (25°C)	Ω	18.2/15.1
Approvals (102G4452)		EN 60335-2-34
Approvals (102G4453, 102G4454)		UL984/CSA-C22.2, EN 60335-2-34

## Dimensions

		102G4452/53	102G4454
Height	mm	A	173
		B	169
Suction connector	location/I.D. mm	C	6.2 ±0.09
Process connector	location/I.D. mm	D	6.2 ±0.09
Discharge connector	location/I.D. mm	E	5.0+0.12/+0.20
Compressors on a pallet	pcs.		125



- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary



### Capacity (EN 12900/CECOMAF)

watt

Evap. temp in °C	-30	-25	-23.3	-20	-15	-10	-5	0	5	7.2	10	15
TL4G, 50Hz	40.8	58.3	65.3	80.3	107	140	180	226	280	306	342	413
TL4G, 60Hz	48.4	69.5	77.8	95.7	127	166						

### Capacity (ASHRAE)

watt

Evap. temp in °C	-30	-25	-23.3	-20	-15	-10	-5	0	5	7.2	10	15
TL4G, 50Hz	50.3	71.9	80.5	99.2	133	173	222	280	347	380	425	515
TL4G, 60Hz	59.6	85.8	96.0	118	157	205						

### Power consumption

watt

Evap. temp in °C	-30	-25	-23.3	-20	-15	-10	-5	0	5	7.2	10	15
TL4G, 50Hz	71.7	82.7	86.6	94.2	106	118	130	142	154	159	165	176
TL4G, 60Hz	74.2	86.8	91.6	101	117	135						

### Current consumption

A

Evap. temp in °C	-30	-25	-23.3	-20	-15	-10	-5	0	5	7.2	10	15
TL4G, 50Hz	0.82	0.84	0.85	0.87	0.90	0.93	0.96	1.00	1.04	1.05	1.08	1.12
TL4G, 60Hz	0.70	0.74	0.76	0.79	0.84	0.90						

### COP (EN 12900/CECOMAF)

W/W

Evap. temp in °C	-30	-25	-23.3	-20	-15	-10	-5	0	5	7.2	10	15
TL4G, 50Hz	0.57	0.70	0.75	0.85	1.01	1.19	1.38	1.59	1.82	1.93	2.07	2.34
TL4G, 60Hz	0.65	0.80	0.85	0.94	1.09	1.23						

### COP (ASHRAE)

W/W

Evap. temp in °C	-30	-25	-23.3	-20	-15	-10	-5	0	5	7.2	10	15
TL4G, 50Hz	0.70	0.87	0.93	1.05	1.25	1.47	1.71	1.97	2.26	2.39	2.57	2.92
TL4G, 60Hz	0.80	0.99	1.05	1.17	1.34	1.52						

Test conditions	EN 12900/CECOMAF	ASHRAE
Condensing temperature	55°C	55°C
Ambient and suction gas temp.	32°C	32°C
Liquid temperature	55°C	32°C
50Hz: Static cooling, 220V		
60Hz: Static cooling, 220V		

### Accessories

Devices	Fig.	TL4G
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0011 103N0018
Starting relay	a2	117U6004
Cover (102G4452)	b	103N2010
Cover (102G4453, 102G4454)	b	103N2011
Starting capacitor 60 µF	c	117U5014
Cord relief	d	103N1010
Protection screen for PTC	g	103N0476
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

