

Dagangan : FREQUENCY INVERTER

Nama Perdagangan : Frequency Inverter

Jenama : Rhymebus

Model : MYG6F2

Kod Tarif (Perintah Duti Kastam 2012) :

8504.40 900

Tarikh Kelulusan : 20 Julai 2016

Keterangan barangan :

Berdasarkan maklumat pemohon barangan dikenali sebagai *Frequency Inverter*. Barangan *suitable for water supply residentials, commercial buildings, apartment, factories, etc.* Barangan adalah seperti gambar dibawah.



Frequency inverter also called frequency converter, it is a power control conversion device to convert normal power supply (50Hz or 60Hz) to another frequency power by inner power semiconductor on/off behaviors, to adjust the electric motors speed.

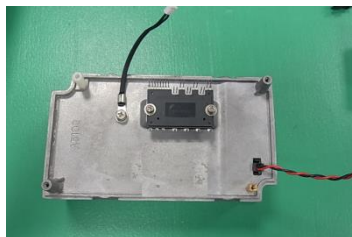
The frequency inverter constantly changing the frequency supply to the motor stator windings to achieve the speed require. Hence integrated to Grundfos pumps, the pumps will operate at required speed to achieve energy saving and constant pressure.

Berdasarkan maklumat pemohon *the frequency inverter is mainly consisted of rectifier (AC to DC), filter, inverter (DC to AC), braking unit, drive unit, detection unit and micro processing unit etc. The control circuit controls main circuit, the rectifier circuit **converts AC power into DC power**, DC intermediate circuit smoothing the rectifier circuit output, then the inverter circuit reverse **DC current into AC current** again.*

Komponen-komponen utama adalah terdiri daripada:

a) **IGBT** (*Insulated Gate Bipolar Transistor*).

An insulated-gate bipolar transistor (IGBT) is a three-terminal power semiconductor device primarily used as an electronic switch which, as it was developed, came to combine high efficiency and fast switching.



b) Main power board.

A main power board (sometimes alternatively known as the motherboard, system board, planar board or logic board, or colloquially) is the main printed circuit board (PCB) found in computers and other expandable systems. It holds and allows communication between many of the crucial electronic components of a system, such as the central processing unit (CPU) and memory, and provides connectors for other peripherals.



c) CPU board with keypad built in.

CPU boards are specified by CPU clock frequency and bus type as well as other features and applications built into the PCB.

Keypad display and button are embedded to the CPU board.



CPU card



CPU card

CPU card installed behind the housing



Keypad

Keypad embedded to the housing

Spesifikasi barangan untuk model MYG6F2 adalah seperti berikut.

1 ϕ 100V Series

Model name (MYG6F2-□□□□B1)	10P5	1001	1002※	1003※
Maximum applicable motor (HP / kW)	0.5/0.4	1/0.75	2/1.5	3/2.2
Rated output capability (kVA)	1.0	1.6	2.9	3.8
Rated output current (A)	2.5	4.2	7.5	10
Rated output voltage (V)	Three-phase 200~240V			
Range of output frequency (Hz)	0.1~400.00Hz			
Power source (φ , V, Hz)	Single-phase 100~120 50/60Hz			
Input current (A)	9.1	15.3	30	40
Permissible AC power source fluctuation	88V~132V 50/60Hz / $\pm 5\%$			
Overload protection	150% of drive rated output current for 1 min			
Cooling method	Nature cooling	Fan cooling		
Applicable safety standards	—			
Protective structure	IP20			
Weight / Mass(kg)	1.1	1.2	2.5	2.5

※: This model is batch production

1 ϕ 200V Series

Model name (MYG6F2-□□□□B1)	20P5	2001	2002	2003※
Maximum applicable motor (HP / kW)	0.5/0.4	1/0.75	2/1.5	3/2.2
Rated output capability (kVA)	1.1	1.6	2.9	3.8
Rated output current (A)	3	4.2	7.5	10
Rated output voltage (V)	Three-phase 200V~240V			
Range of output frequency (Hz)	0.1~400.00Hz			
Power source (φ , V, Hz)	Single-phase 200~240V 50/60Hz			
Input current (A)	5.8	7.7	13.7	20
Permissible AC power source fluctuation	176~264V 50/60Hz / $\pm 5\%$			
Overload protection	150% of drive rated output current for 1 min.			
Cooling method	Nature cooling	Fan cooling		
Applicable safety standards	—			
Protective structure	IP20			
Weight / Mass(kg)	1.1	1.2	1.2	2.5

※: This model is batch production

3 φ 200V Series

Model name (MYG6F2-□□□□B3)	20P5	2001	21P5	2002	2003	2004※	2005※
Maximum applicable motor (HP / kW)	0.5/0.4	1/0.75	1.5/1.1	2/1.5	3/2.2	4/3	5/3.7
Rated output capability (kVA)	1.1	1.8	2.3	3	3.8	5	6.5
Rated output current (A)	3	4.2	6	8	10	13	17
Rated output voltage (V)	Three-phase 200~240V						
Range of output frequency (Hz)	0.1~400.00Hz						
Power source (φ, V, Hz)	Three-phase 200~240V 50/60Hz						
Input current (A)	3.2	4.4	6.3	8.4	11.5	15	19
Permissible AC power source fluctuation	176~264V 50/60Hz / ±5%						
Overload protection	150% of drive rated output current for 1 min.						
Cooling method	Fan cooling						
Applicable safety standards	-						
Protective structure	IP20						
Weight / Mass(kg)	1.1	1.1	1.1	1.2	1.2	2.5	2.5

※: This model is batch production

3 φ 400V Series

Model name (MYG6F2-□□□□B3)	4001	4002	4003	4005※	4007※
Maximum applicable motor (HP / kW)	1/0.75	2/1.5	3/2.2	5/3.7	7.5/5.5
Rated output capability (kVA)	1.9	3	4.2	6.9	11
Rated output current (A)	2.5	4	5.5	9	14
Rated output voltage (V)	Three-phase 380~480V				
Range of output frequency (Hz)	0.1~400.00Hz				
Power source (φ, V, Hz)	Three-phase 380~480V 50/60Hz				
Input current (A)	2.8	4.4	6.1	10.3	16
Permissible AC power source fluctuation	332V~528V 50/60Hz / ±5%				
Overload protection	150% of drive rated output current for 1 min.				
Cooling method	Nature cooling	Fan cooling			
Applicable safety standards	-				
Protective structure	IP20				
Weight / Mass(kg)	1.1	1.2	1.2	2.5	2.5

※: This model is batch production

Ketetapan:

Ketua Pengarah Kastam memutuskan barangan ini sesuai diperjeniskan di bawah kod tarif **8504.40 900** sebagai **electrical static converters: other** berdasarkan alasan-alasan diatas :-

Barangan dikenali sebagai *Frequency Inverter*. Ia berupaya untuk mengekalkan dan menghasilkan *constent pressure & energy saving variable frequency control system*.

Barangan mempunyai kemampuan untuk *regulate quantiti voltage* yang diperlukan oleh *AC Motor pada water supply untuk meet actual demand*. *Suitable for water supply residentials, commercial buildings, apartment, factories, etc.*

Barangan boleh *converts AC power into DC power dan DC current into AC current again*.