

**Dagangan** : COMPRESSOR FOR REFRIGERATION EQUIPMENT, WITH A REFRIGERATION CAPACITY EXCEEDING 21.10kW

Nama Perdagangan : Vilter Single Screw Refrigeration Compressors

Jenama : Vilter

Model : VSM-501

**Kod Tarif (Perintah Duti Kastam 2012) :**

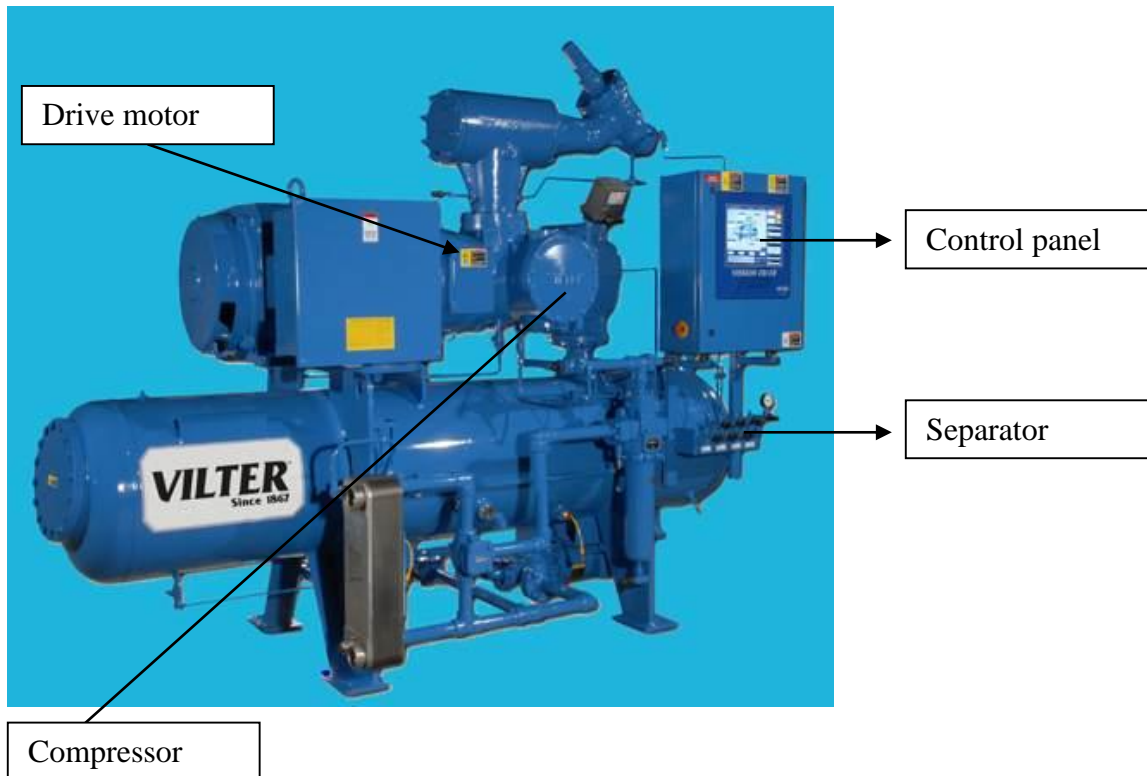
8414.30.40 00 (PDK 2017)

**Tarikh Kelulusan** : 20 Jun 2017

**Keterangan barangan :**

Barangan yang dinamakan sebagai *single screw refrigeration compressors* merupakan sejenis *complete compressor unit* yang dilengkapi dengan komponen utama seperti *drive motor*, *oil separator*, *compressor* dan *microprocessor control*.

Barangan adalah seperti gambar di bawah:-

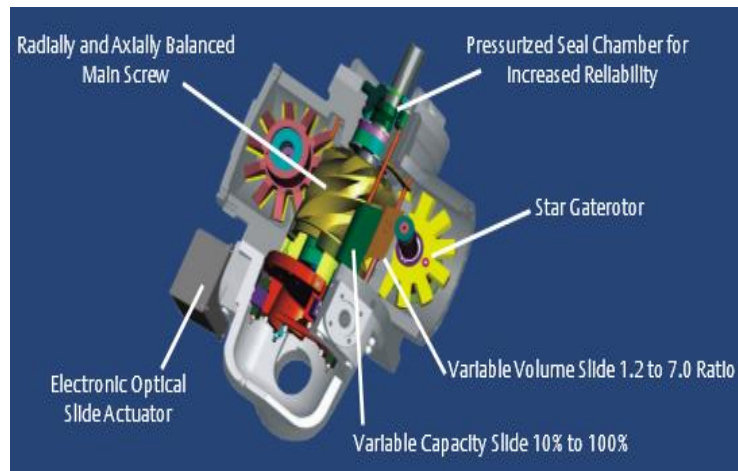


Fungsi utama barangan adalah *to take the low pressure vapor from the suction side of the compressor and compress the refrigerant into high pressure and discharge it to the discharge side of the compressor. These compressors are used in industrial refrigeration industries for process cooling applications.*

Spesifikasi barangan adalah seperti berikut:-

<b>Bil</b>	<b>Items</b>	<b>Specifications</b>
1	Model Number	VSM-501
2	Displacement	CFM m3/hr
3	Ammonia Base Ratings (a)	Tons BHP
	Base Ratings (b)	<b>Capacity (kW)</b> Absorbed Power (kW)
4	Standard connection sizes	Standard
		Discharge
5	Unit dimensions and weights (b)	Length ft-in (mm)
		Width single oil filter ft-in (mm)
		Width dual oil filter ft-in (mm)
		Height ft-in (mm)
		Shipping weight (Lbs) (kg)

Fungsi komponen-komponen utama bagi *compressor* adalah seperti berikut :-



<b>Bil</b>	<b>Components</b>	<b>Function</b>
1	Main screw/Rotor	Which will rotate when coupled with an electric motor via motor coupling.
2	Star-Gate Rotor	Which will rotate simultaneously with the main rotor by the mating grooves of the main rotor and star gate. This action will create a compress action where the low pressure refrigerant is compressed by the star gate on the rotor and the refrigerant changes to high pressure during discharge.
3	Slide valves	Controls the amount of refrigerant discharge from the grooves between the main rotor and star gate.

Barangan merupakan *compressor unit* yang terdiri daripada komponen utama iaitu *motor, microprocessor control, compressor* dan *oil separator*.

Kegunaan/fungsi barangan adalah untuk *compressed the refrigerant vapor from low pressure and raised to a higher pressure*.

Barangan digunakan di dalam *industrial refrigeration industries for process cooling applications*.

Berdasarkan maklumat pemohon, barangan mempunyai *refrigeration capacity* sebanyak 651 kW.

Ketua Pengarah Kastam Malaysia memutuskan barangan tersebut sesuai diperjeniskan di bawah kod tarif **8414.30.40 00** sebagai ***compressors of a kind used in refrigerating equipment, with a refrigeration capacity exceeding 21.10 kW***.

Barangan adalah merupakan *complete compressor unit* yang dilengkapi dengan komponen utama seperti *drive motor, oil separator, compressor* dan *microprocessor control*.

Barangan digunakan di dalam *refrigeration industries* di mana fungsi utama barangan adalah *to take in the low pressure refrigerant vapor from the suction side of the compressor and compress the refrigerant into high pressure and discharge it to the discharge side of the compressor*.

Berdasarkan kepada spesifikasi barangan iaitu model VSM-501, *refrigeration capacity* bagi barangan adalah 651 kW. Oleh itu, barangan sesuai diperjeniskan di bawah kod tarif 8414.30.40 00 iaitu *compressors of a kind used in refrigerating equipment, with a refrigeration capacity exceeding 21.10 kW*.

Barangan adalah sejenis *single screw compressor* yang digunakan di dalam *refrigeration industries*. Barangan mendapat liputan di bawah *subheading* 8414.30 di dalam EN HS 2012 muka surat XVI-8414-2 seperti berikut:-

**84.14 - *Air or vacuum pumps, air or other gas compressors and fans; ventilating or recycling hoods incorporating a fan, whether or not fitted with filters.***

8414.10 – *Vacuum pumps*

8414.20 – *Hand or foot-operated air pumps*

8414.30 – *Compressors of a kind used in refrigerating equipment*

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*This heading covers machines and appliances, hand-operated or power driven, for the compression of air or other gases, or for creating a vacuum, and also machines for circulating air or other gases.*

**(A) *PUMPS AND COMPRESSORS***

*In general, air pumps, vacuum pumps and compressors function on the same principles as and are broadly of similar construction to the liquid pumps (piston, rotary, centrifugal or ejector pumps) described under the preceding heading.*

*In addition, however, there are certain special types, particularly for producing high vacua, such as diffusion pumps (the pump fluid being oil or mercury), molecular pumps and entrainment pumps (getter pumps, cryopumps). Diffusion pumps, however, are sometimes made of glass, in which case they are excluded (Chapter 70).*

*Air and vacuum pumps serve many purposes; for facilitating boiling, distilling or evaporating at reduced pressure; for evacuating electric lamps or tubes, vacuum flasks, etc. Air pumps serve for pumping air at pressure (e.g., for inflating pneumatic tyres).*

*Unlike liquid pumps, air or other gas compressors (other than low pressure or intermittent working compressors) are water-cooled or have fins or other means for air cooling (surface cooling) to dissipate the considerable heat of compression which is generated.*

*They are several types of compressors, for example, reciprocating piston, centrifugal, axial and rotary compressors. A special type of compressor is the exhaust-gas turbocharger used in internal-combustion piston engines to increase power output.*

*Compressors are widely used: for compressing gases into gas cylinders; in chemical processes; for refrigerators, etc. and for compressing air or other gases in reservoirs to be used to force feed machines or apparatus such as compressed air engines, pneumatic picks, winches, brakes, pneumatic conveyor tubes, submarine ballast tanks, etc.*

Berdasarkan keterangan dan fakta diatas, barangan sesuai diperjeniskan di bawah kod tarif **8414.30.40 00** yang mendapat liputan secara khusus berdasarkan Perintah Duti Kastam (PDK 2017) seperti berikut :

<b>84.14</b>	<b><i>Air or vacuum pumps, air or other gas compressors and fans; ventilating or recycling hoods incorporating a fan, whether or not fitted with filters.</i></b>
8414.10.00 00	- <i>Vacuum pumps</i>
8414.20	- <i>Hand or foot operated air pumps:</i>
8414.20.10 00	- - <i>Bicycle pumps</i>
8414.20.90 00	- - <i>Other</i>
8414.30	- <i>Compressors of a kind used in refrigerating equipment:</i>
8414.30.40 00	- - <i>With a refrigeration capacity exceeding 21.10 kW, or with a displacement per revolution of 220cc or more</i>
8414.30.90 00	- - <i>Other</i>