SIEMENS

Infrastructure & Cities Sector
Building Technologies

Environmental Product Declaration

Product	Type of equipment / Product No.	MVS661.25-016N MVS661.25-2.5N MVS661.25-0.4N MVS661.25-6.3N MVS661.25-1.0N
	Designation	Modulating refrigerant valves, PS53 for ammonia (R717) and safety refrigerants
	Product line	Acvatix - Valves and actuators

Process control

Siemens Schweiz AG
Building Technologies Division
Gubelstrasse 22
CH-6301 Zug

Management System	since	by
ISO 14001 (Environment)	20.10.1998	SQS
ISO 9001 (Quality)	22.07.1986	SQS

Environmentally compatible product design

Product responsibility of Siemens covers the entire product life cycle. Siemens already assesses, avoids and minimizes the environmental impact of its products with respect to production, procurement, sales, use, services and disposal during the product and process planning phases by complying with Siemens Standard SN 36350 "Environmentally compatible products".

Product use

Typical energy consumption	58kWh/a
Maintenance	Not necessary

Risk of fire

Fire protection according to	EN 60730
Fire load	10MJ

Packaging

21-PAP Fiber board	Paperboard, cardbord boxes	120g
Styrofoam	Transport protection	150g
Notes on disposal	One-way, recyclable	

Materials	Total weight of device		4'937g
	The total weight of a device may deviate from the total of the weights of all individual components due to rounding.		
Plastics	PC; GF 10%; halogenated	cover, base, mask	193g
	PBT; GF 30%; halogen-free	coil cover	125g
	CR, VQM	O-Ring seals, seals	8g
	PTFE	sealing disk, seat, guiding element	6g
Metals	Steel stainless	valve body (1.4308)	2'115g
		cylinder, cover, pressure ring	
		socket, piston, lock part, flow restrictor, stems	
	steel CrNi	sintering bush, spring, filter part	25g
	Steel; nickel plated	screws, distance rings	30g
	Steel	core, ancor, pressure tube, U-bracket	1'821g
	Copper wire (CuSn)	coils	541g
PCBAs (Printed Circuit Board assembled)	FR4; halogenated	pc board including components	73g

Disposal

The device should not be disposed of as unsorted municipal waste. The special treatment for specific components may be mandated by law or ecologically sensible.
Observe all local and applicable laws.

Comments

EU-directive 2002/95/EC (RoHS)

The device is free from substances banned by the EU-Directive 2002/95/EC (RoHS) - allowing for the exemptions acc. to Decision 2010/571/EU:
Pb, Hg, Cr6+, PBB, PBDE: <0.1% by weight in homogeneous materials
Cd: <0.01% by weight in homogeneous materials

Regulation (EC) No. 1907/2006 (REACH)

To the best of our knowledge and according to the information of our suppliers the above mentioned device and its packaging contain no substances of the candidate list according to Article 59 (1, 10) of the regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) in concentrations above 0.1 % w/w.

Status according to the creation date of this document.

Environmental benefits

- Due to precise and fast linear positioning of the MVS661.25..N the compressor energy consumption for expansion application is reduced by approx. 5% versus thermostatic expansion valves. At 1000 kW refrigerating capacity, 240 kW electrical power and 100% duty cycle, this results in energy saving of approx. 105,000 kWh/year.
- Approx 20% less refrigerant filling due to precise system coordination and high control quality.
- MVS661.25..N`s robust, hermetic design reduces the risk of refrigerant leakage.

Please contact your local Siemens branch office to get further information on environmental aspects and disposal.