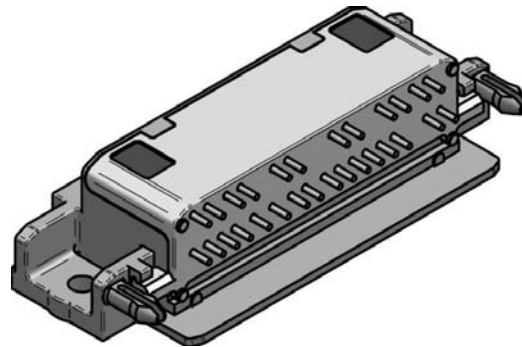

Standard Power Integrated Module



flow90PACK1

Features:

***flow90PACK 1* up to 600V/75A, 1200V/35A**

- 3 ~ IGBT inverter
- Temperature Sensor
- Vincotech - power flow through for simple PCB routing
- Vincotech - Clip In the reliable interconnection between PCB, module and heatsink • 600V trench fieldstop
- 1,2kV trench Fieldstop

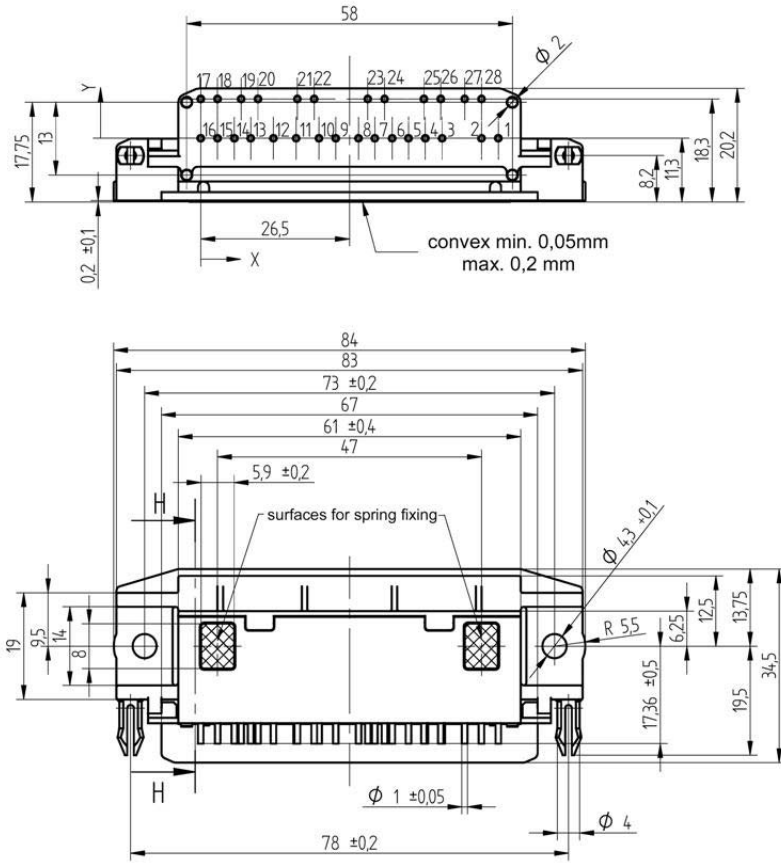
Dedicated for motor drive applications with a mechanic arrangement of 90° between heat-sink and PCB

Module Types

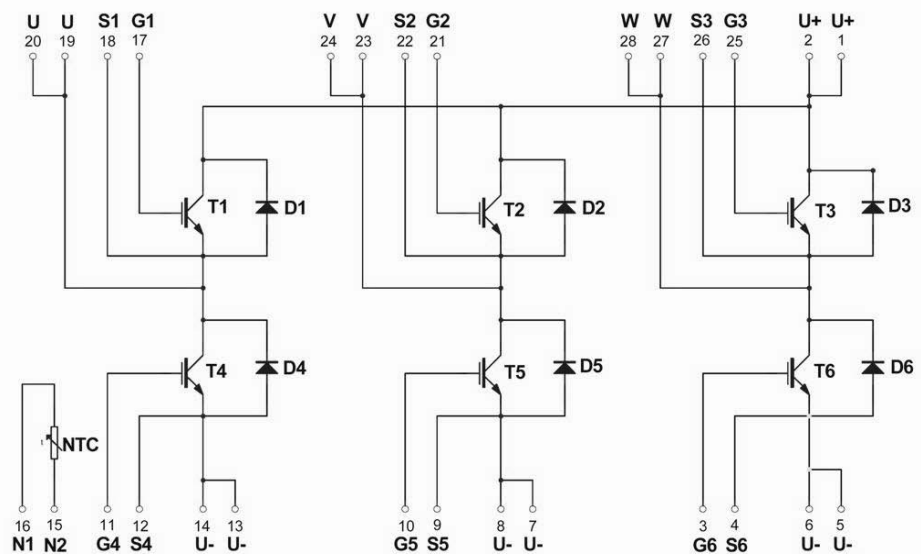
selection data:	Vincotech part number
600V Trench-Fieldstop	
600V / 30A	V23990-P704-F
600V / 50A	V23990-P705-F
600V / 75A	V23990-P706-F
1200V Trench-Fieldstop	
1200V / 15A	V23990-P708-F
1200V / 25A	V23990-P709-F
1200V / 35A	V23990-P700-F

Pin Table		
Pin	X	Y
1	53	0
2	50	0
3	43	0
4	40	0
5	37	0
6	34,1	0
7	31	0
8	28,1	0
9	24,05	0
10	21,05	0
11	17	0
12	12,95	0
13	8,9	0
14	6	0
15	3	0
16	0	0
17	0	7
18	3	7
19	7,2	7
20	10,2	7
21	17,2	7
22	20,2	7
23	29,75	7
24	32,75	7
25	39,75	7
26	42,75	7
27	47	7
28	50	7

Outline / Pinout



Schematics



Handling Instruction

Handling Instructions...

... to the PCB

- The module must be fixed to the PCB by clipping into the adequate holes before pin soldering. See below
- After fixing all pins must be soldered into the PCB.
- During assembly, at a max. module temperature of 25°C, the pins should not be drawn or pushed more than ± 0.2 mm or loaded with a higher force than 35N.
- At a maximum substrate-temperature of 100°C the load of the pin should not exceed ± 5 N.
- Vibration stress on pins is not allowed

...to the heat sink

- the heat sink surface must be clean and particle less.
- the flatness must be < 0.05 mm for 100 mm continuous.
- the surface roughness should be less than $R_z = 0.01$ mm.

...to the thermal paste

- homogenous applying of the thermal conducting paste over the whole module plate with a thickness of max. 0.05 mm.
- Thicker thermal paste can raise the value of the R_{th} .

...to the fastening screws to the heat sink if plain washer is used and optional with a spring lock washer

Important parameter

screw	M4 DIN 7985
flat washer	DIN 125 or DIN 433
spring washer	DIN 127 or DIN 128
mounting torque	$M_a = 2.0-2.2$ Nm
