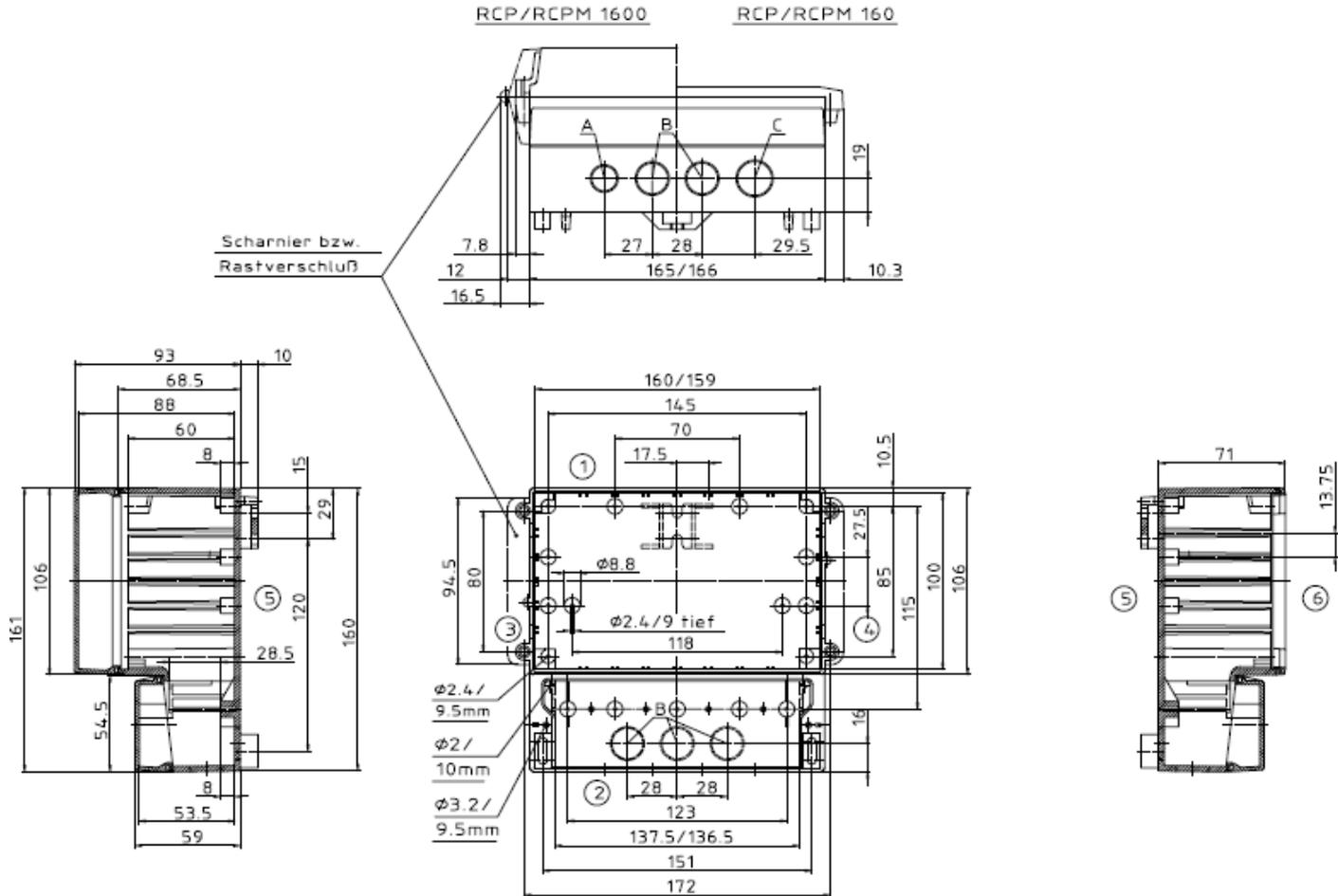


Freeverter technical information

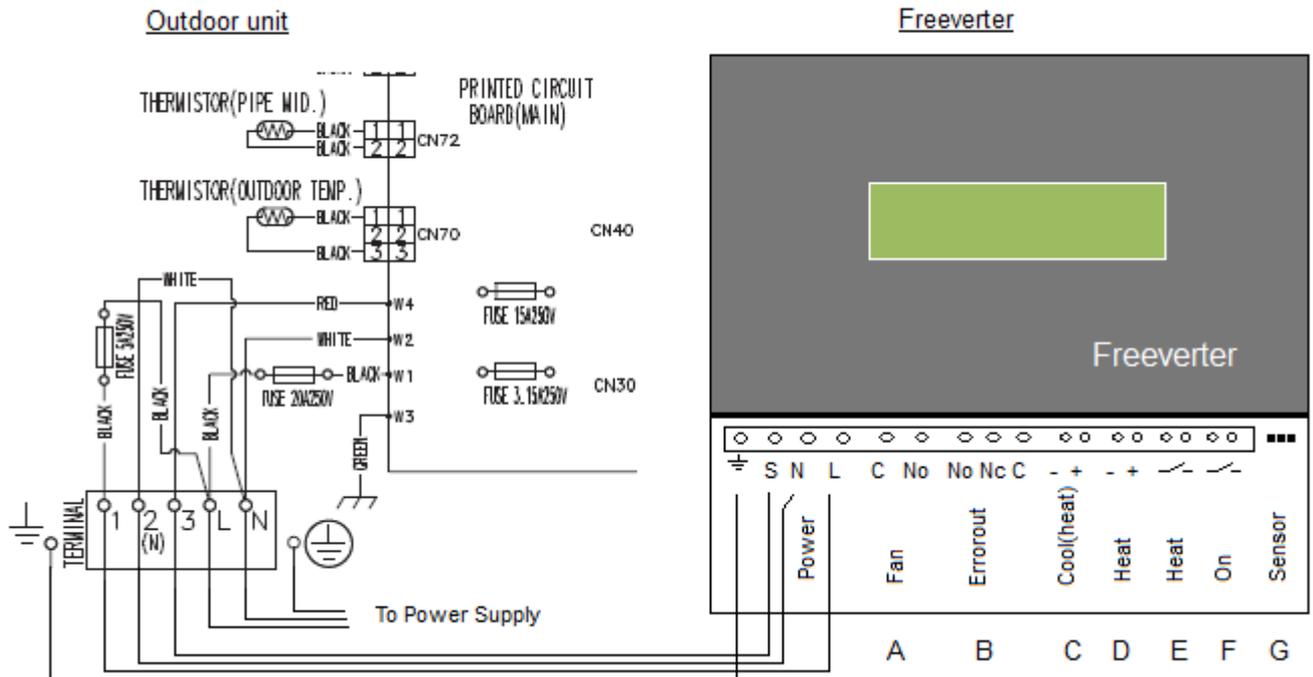
1) Dimensions



2) Technical specifications

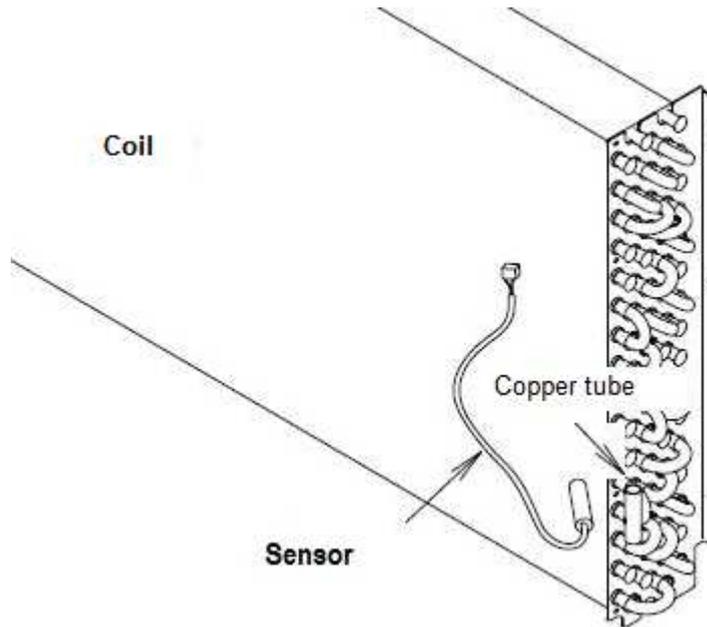
Type	Freeverter (for FG outdoor units)
Code	UTY-FVI
Power source	230VAC 50Hz 1.5mm ²
Input Watts	4W
Current	0.015A
Inputs Cool/Heat	Dry contact 20mA (field supplied)
Inputs Cool/Heat 0-10VDC	Impedance 10Kohm
Sensor Coil	Linear sensor, 1,5 meter long
Fanout	Dry Contact relay max 240V, 0.3A
Errorout	Dry Contact relay max 240V, 0.3A
Colour	Light grey (RAL7035)
Ingress Protection rating	IP66
Applicable outdoor units	AO_A__(LACL, LALL,LFTL,LATL,LBTL), AO_D__LATT, AO_G__LALL, AO_G__LATT

3) Electrical connection

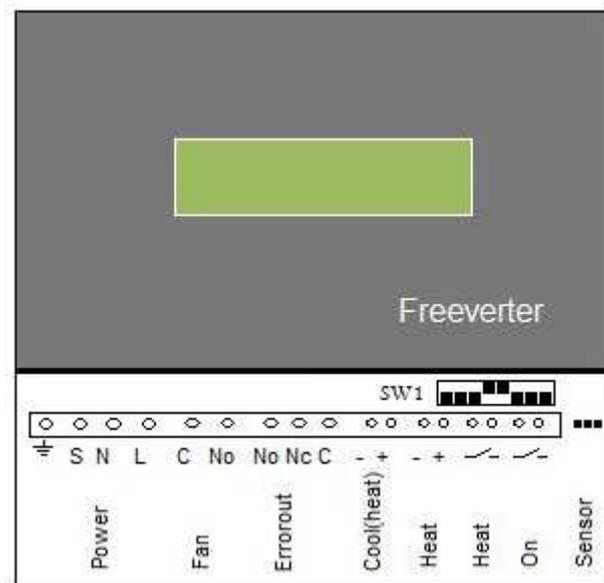


- A) Fan output
This output (dry contact, relay contact) is always closed, only if the outdoor unit is performing defrost cycle, this contact will open
- B) Error Output
This output (dry contact, relay contact) is always closed only if the outdoor unit or the freeverter has an error or the power supply is interrupted the contact changes position
- C) Cool (Heat) 0-10Vdc
This is an analog input signal (field supplied) to limit the unit in 10 steps (10Vdc = maximum demand)
If 'Heat' (E) is open the unit runs in cooling, if 'Heat' (E) is closed unit will run in heating
Important: contact 'On' (F) should not be used when using this input.
- D) Heat 0-10Vdc
This is an analog input signal (field supplied) to limit the unit in 10 steps (10Vdc = maximum demand)
Important: contact 'Heat' (E) and contact 'On' (F) should not be used when using this input.
- E) Heat
This contact can be used with either 'Cool (heat)' (C) or with 'On' (F)
If the contact is closed the unit will always run in heat
- F) On
If this contact is closed the unit operates in cooling if 'Heat' (E) is open, the unit will run in heating if 'Heat' (E) is closed
- G) Sensor
This sensor needs to be mounted on the coil see Fig1.

Fig1.



4) Dip switches



SW1,1 = ON (same as contact 'ON')

SW1,2 = Heat (same as contact 'Heat')

SW1,3 = Test run

Disconnect all analog inputs 0-10Vdc or they should be deactivated if test run is needed.

The test run will put the outdoor unit in max demand for 30 minutes

a) To activate test run: stop unit by opening 'ON' + SW1,1 to off put SW1,3 to on then close contact 'ON' or set SW1,1 to on

b) To stop test run: stop unit by opening contact 'ON' + set SW1,1 to off, followed by setting SW1,3 back to off

SW1,4 = CL (cool active) if set to on cooling enabled, set to off cooling disabled

SW1,5 = HT (heat active) if set to on heating enabled, set to off heating disabled

<u>Type Outdoor units</u>	<u>SW1,6</u>	<u>SW1,7(B)</u>	<u>SW1,8(A)</u>
AO_A__(LACL, LALL,LFTL,LATL,LBTL)	OFF	OFF	OFF
AO_G__LALL/LALA/LETL	OFF	OFF	ON
AO_G 54 LATT	OFF	OFF	ON
AO_G 45 LATT	OFF	ON	OFF
AO_G 36 LATT	OFF	ON	ON
AO_G 24 LAT3	ON	ON	OFF

4) Error display list

Display text

Input control error
 Indoor sensor error
 Indoor Capacity error
 Outdoor signal error
 Check Outdoor Unit
 Connected indoor abn
 Indoor signal error
 Discharge sensor err
 Coil out sensor err
 Coil mid sensor err
 Outside sensor error
 Inverter sensor err
 Compr. sensor error
 2-way vlv sensor err
 3-way vlv sensor err
 P.F.C. sensor err
 Pressure switch abn
 IPM protection
 Current Tr. Error
 Compr. location err
 Outdoor fan error
 Computer com. error
 Inverter error
 Discharge temp error
 Compressor Temp err
 High pressure error
 Low pressure error
 Active filter error
 P.F.C. circuit error
 P.F.C. pcb error

Full text

Input control error
 Indoor sensor error
 Indoor Capacity error
 Outdoor signal error
 Check Outdoor Unit
 Connected indoor abnormal
 Indoor signal error
 Discharge sensor error
 Coil outlet sensor error
 Coil middle sensor error
 Outside temperature sensor error
 Inverter sensor error
 Compressor sensor error
 2-way valve sensor error
 3-way valve sensor error
 P.F.C. sensor error
 Pressure switch abnormal
 IPM protection
 CT error (current transformar error)
 Compressor location error
 Outdoor fan error
 Computer communication error
 Inverter error
 Discharge temperature error
 Compressor temperature error
 High pressure error
 Low pressure error
 Active filter error
 P.F.C. circuit error
 P.F.C. pcb error