

ClimaCheck Magnetic Probes - User Guide

- part No. 400 26X

The ClimaCheck Magnetic Probes is only intended to be used for voltage measuring with high resistance instruments/meters such as ClimaCheck EP Pro I and EP Pro II energy- power meters or similar equipment measuring voltage. The probes can be used as a complete set of four leads for 3-phase systems with neutral (L1, L2, L3 and N) or two leads for a single phase system (L1 and N).

Rated voltage

ClimaCheck Magnetic probes are tested and certified for voltage up to 300 V (520 V phase to phase) CAT III to be used for voltage measurement high resistance instruments.

Safety Precautions

Read the instruction manuals carefully before starting to use ClimaCheck Performance Analysing systems.



Do not grip the probes in front of the red safety barrier!

Do not use ClimaCheck Magnetic Probes to connect electrical loads to a power supply!

If equipment is used in a way not specified by producer the protection and safety provided may be impaired.

ClimaCheck products are only intended for use by competent technicians/engineers complying with local requirements for certifications/licenses involving activities related to electrical installations.

Any work with electricity involves potential danger to human health and system integrity if not conducted with caution. Always inspect the equipment for damaged cables or other components before use. For many installations loss of product or disturbances in operation incurs high costs. ClimaCheck assumes no responsibility for injuries or costs that may occur as a result of failures in connection with measurements. The user must evaluate whether an inspection can be carried out without risk of injury and/or damage. Measurements should only be carried out when it can be done under safe working conditions and without risks.

Operation

Initiate every measurement job by checking the overall condition of the magnetic probes. Check for cable wear and loose fittings.

To measure voltage with the magnetic probes, connect the 4mm safety plug to the EP Pro I or EP Pro II energy- and power meters 4mm safety chassis sockets, or other similar voltage measurement equipment. Attach the magnetic tip ends to a suitable point on the measured object, e.g. screw heads on a compressors contactor terminals.



Make sure to connect right phase to the right input on the EP Pro.



The strength of the magnets is not intended to be sufficient to support weight of the leads. The weight of the cables should be supported by letting them rest on or attach them to existing object close surroundings or i.e. by hanging them in a wire.

Symbols and Markings

The symbols found on the ClimaCheck Magnetic probes with explanations are:

	Double insulated.
	Refer to explanation in this instruction sheet.

The ClimaCheck Magnetic Probes have an IEC 61010 category classification of CAT III. They may be connected to equipment of CAT III or lower as specified by IEC 61010. *Table 1* contains a summary of the definitions for each category:

CAT IV	Origin of installation, utility level and any outside cable run.
CAT III	Distribution wiring, including mains bus, feeders and branch circuits as well as permanently installed loads.
CAT II	Receptacle outlet circuit and plug-in loads.
CAT I	Protected electronic circuits.

Table 1

Every lead of the set is marked with its own coloured phase label. Colour codes are according to standard on end-user market.

For example of colour codes see *Table 2*.

ClimaCheck Part no.	Market	Phase L1	Phase L2	Phase L3	Neutral
400 260	EU, Hong Kong, Singapore	Brown	Black	Grey	Blue
400 261	USA	Black	Red	Blue	White
400 262	Canada	Red	Black	Blue	White
400 263	India & Pakistan	Red	Yellow	Blue	Black
400 264	Australia & New Zealand	Red	White	Blue	Black

Table 2

Safety system

The cables have a built-in colour indicator to ease the recognition of damaged insulation.

The magnetic probes have a safety barrier feature to prevent accidental contact with the magnetic end and measuring point by the operator.

Maintenance

The magnetic probes shall be kept clean. Clean with a wet cloth and mild detergent when needed.

Make sure to keep the magnetic touch ends clean and free from metallic dust.