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**ULTRA-LOW-TEMPERATURE RADIATOR ULOW-E2, TYPE 22**

**General comments**

The ULOW-E2 ultra-low temperature radiator is a combination of a T6 central connection radiator, type 22, and a dynamically regulated fan unit that is activated automatically at full load, depending on the relevant pre-settings, therefore allowing significantly increased heat output. Due to these features, the VOGEL&NOOT – ULOW-E2 can be used for all low-temperature and ultra-low temperature cycles (e.g. 40/35; 35/30…) and can even be combined with other systems (e.g. floor heating, wall heating). Due to its traditional design, the ULOW-E2 ultra-low temperature radiator can be operated with all sorts of heat sources (biomass, heat pump, solar, gas condenser, oil condenser etc.). In connection with a heat source that can be switched to cooling operation (e.g. heat pump), the ULOW-E2 ultra-low temperature radiator has a pre-installed and integrated "tempering function". (This function, however, is only available if all pre-installations regarding the cooling operation of the system have been made.)

**Material & surface**

Central connection radiator made of cold-rolled sheet steel according to EN 442-1, galvanised 1mm thick front panel, primer annealed at 190°C, complete with lacquer in the form of electrostatic powder coating according to DIN 55900, part 2, in RAL 9016, annealed at 210°C object temperature. Equipped with a readily installed valve set, suitable for double and single tube systems, using a single tube manifold. The kv value of the factory-mounted insert valve is pre-set and adjusted to the heat output, however, allowing customised adjustments in the range between 0,13 and 0,75. Adjustment of the radiator share for single-tube systems from 30%-50%.

**Equipment:**

Equipped with pre-mounted thermostat valve and construction site cap, hanging brackets welded to the back, a removable top cover and two closed, removable lateral parts. Integrated and readily installed 12 Volt fan unit for output support in full-load operation (approx. 1 Watt per unit - the number of fan units depends on the design length and is pre-determined ex works); the fan units are flexibly fastened on a guiding rail. An exchange is possible by removing one lateral part and disconnecting the contacts below the covers, as well as by way of simply pulling out the fan units (the minimum lateral wall clearance must be 150 mm to ensure the installation and removal of the fan units); the integrated fan units are controlled by a clearly structured, individually adjustable regulation and control unit mounted on the surface of the top cover. The operation of this control unit requires a connection voltage of 230 Volt. Furthermore, the product comes with a thermostat head as well as a knee brace with safety catch (the specifications on the thermostat head match the setting parameters at the defined control and regulation unit. Therefore, proper operation is only possible with the supplied thermostat head); fit-in turnable special vent plug and blind plug.

**Technical data:**

Complete optional pre-installation, flushing and leakage test with the VN installation positioning device – 3/4“ A. G. and the VN rinse arch (accessory). Alternatively, also connectable on one side or both ways as compact radiator. Performance-tested according to DIN EN 442 und permanent production monitoring according to EN-ISO 9001/9002. Packaged three-fold (cardboard, edge protection, shrink film). Variable connections available for copper, steel, plastic and metal-composite tubes, maximum excess pressure 10 bar and excess test pressure 13 bar. Maximum operating temperature 60°C (due to fan unit).

Protection class: IP14

Operation modes: Static operation, comfort operation and boost operation.

**Connections:**

4 x G 1/2 I.G. and 2 x G 3/4 A.G. at the bottom centre.

Thermostat valve at the top right (can be changed to top left without any problem).

