isovac®

# FULLY PROCESSED



# isovac 600-65 A

## The perfect solution for direct application

Manufactured in the most modern production lines, this fully processed isovac® grade exhibits highly homogeneous properties across the width and length of the entire strip. The result is excellent and consistent processability in the manufacture of highly efficient electrical components.
Upon request, isovac 600-65 A can be supplied with an electrical steel insulation system and can be used directly in as-delivered condition.

**Convincing advantages:**

- Best processability through consistent mechanical properties and homogeneous, clean surfaces
- Excellent stackability resulting from high dimensional accuracy in rolling direction and perpendicular to rolling direction (thickness tolerance)
- Innovative electrical steel insulation systems upon request

greentec steel

Premium quality
with reduced carbon footprint

isovac®
greentec steel

voestalpine supplies isovac 600-65 A, an electrical steel of the highest quality. We offer you a customer-focused overall package of products, service and logistics in addition to all the advantages of our integrated metallurgical facility and Steel Service Centers.

### Grade named pursuant to conventional international standards:

| Grade named according to isovac® | DIN EN 10106 | | IEC | JIS | GOST | ASTM | AISI | IS648 | GB/T2521.1 |
|---|---|---|---|---|---|---|---|---|---|
| | Material No. | Abbreviation | 60404-8-4 | C2552 | 21427.2 | A677 | | | |
| isovac 600-65 A | 1.0825 | M600-65A | M600-65A 5 | 65A600 | 2212 | - | M-45 | 65C600 | 65W600 |

### Mechanical properties:

Tensile test pursuant to DIN EN ISO 6892-1 and hardness pursuant to DIN EN ISO 6507-1 (Typical values);
Test direction: Transverse

| Grade named according to isovac® | Yield strength $R_{eH}$ [MPa] | 0.2 %-Yield strength $R_{p0.2}$ [MPa] | Tensile strength $R_m$ [MPa] | Elongation $A_{80}$ [%] | Hardness HV5 [-] |
|---|---|---|---|---|---|
| isovac 600-65 A | 355 | 325 | 475 | 33.5 | 155 |

### Magnetic properties:

in as-delivered condition (Typical values)
Magnetic measurement pursuant to DIN EN 60404-2 (Epstein test)
Test direction: Mixed longitudinal and transverse

| Grade named according to isovac® | Specific total loss | | | | Magnetic polarization | | | Relative permeability |
|---|---|---|---|---|---|---|---|---|
| | 1.0 T P10 | | 1.5 T P15 | | 2500 A/m J25 | 5000 A/m J50 | 10000 A/m J100 | 1.5 T $\mu_r$ |
| | 50 Hz [W/kg] | 60 Hz [W/lb] | 50 Hz [W/kg] | 60 Hz [W/lb] | [T] | [T] | [T] | [-] |
| isovac 600-65 A | 2.35 | 1.39 | 5.20 | 3.07 | 1.62 | 1.70 | 1.81 | 1500 |

### Physical properties:

Typical values
Density in accordance with DIN EN 10106

| Grade named according to isovac® | Density ρ [g/cm³] | Specific electrical resistance $\rho_s$ [μΩcm] | Thermal conductivity λ [W/mK] |
|---|---|---|---|
| isovac 600-65 A | 7.75 | 35.8 | 33 |

Datasheets and simulation data are available at
www.voestalpine.com/isovac/en/product-overview/data-sheets

## Available Dimensions

| Grade named according to isovac® | Delivery form | Width [mm] | Length [mm] |
|---|---|---|---|
| isovac 600-65 A | Wide strip / Slit strip | 19 – 1590 | - |
| | Cut-to-length sheets | 300 – 1590 | 300 – 5000 |

## Deliverable coating systems

| Grade named according to isovac® | Uncoated | C-3 | Backlack | C-5 | C-6 |
|---|---|---|---|---|---|
| isovac 600-65 A | ✓ | ✓ | ○ | ✓ | ✓ |

✓ Available ○ On request

greentec steel

Premium quality with reduced carbon footprint

isovac®

greentec steel

| Fully processed electrical steel – greentec steel Edition |
|---|
| Max. carbon footprint 2.45 kg $CO_2$e per kg of steel [1] |

[1] per EN 15804+A2 (EPD methodology) cradle to gate

All products, dimensions and steel grades listed in each voestalpine supply range are available as greentec steel Edition.

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Please find further information and downloadable files at the following link:
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