SWS HARDWARE

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TECTUS ENERGY 3D Adjustable Concealed Hinge 200 x 32mm 120KG without Cables - SW176 Bronze Finish Dark

Variant code: TE540.3D.EGY.SW176

The **TECTUS ENERGY 3D A8 Adjustable Concealed Hinge** is a high-performance hinge system combining a **completely concealed design with permanent energy transfer**. Designed for **unrebated heavy-duty doors**, it measures **200 x 32mm** and provides a **load capacity of up to 100kg**, making it suitable for demanding architectural door installations requiring concealed electrical connectivity.

The hinge accommodates **door claddings up to 8mm on both sides** and is suitable for use with **timber, steel or aluminium frames**. Comfortable **3D adjustment** allows accurate door positioning, with **side adjustment of +/- 3.0mm, height adjustment of +/- 3.0mm and compression adjustment of +/- 1.0mm**. Maintenance-free slide bearings support smooth and dependable operation.

Its integrated **permanent energy transfer** enables electrical power to be transferred discreetly between the frame and door while maintaining the clean appearance of a completely concealed hinge system. **Individual connection adapter options** provide flexibility for different electrical applications. The hinge carries **CE, IFT, UL and Certifire certification** and is classified according to **EN 1935 / EAD**.

Product Features

- **Completely concealed hinge system**
- **Permanent energy transfer** integrated into the hinge system
- **200 x 32mm** hinge dimensions
- **Load capacity up to 100kg**
- Designed for **unrebated heavy-duty doors**
- Suitable for **timber, steel or aluminium frames**
- Accommodates **door claddings up to**

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8mm on both sides
- **Individual connection adapter options** for flexible electrical integration
- Provides comfortable **3D adjustment**
- **Side adjustment:** +/- 3.0mm
- **Height adjustment:** +/- 3.0mm
- **Compression adjustment:** +/- 1.0mm
- Features **maintenance-free slide bearings**
- Provides an **opening angle up to 180°**
- **CE, IFT, UL and Certifire certified**

Product Benefits

- **Permanent energy transfer provides concealed electrical connectivity between the frame and door**
- **Completely concealed installation maintains a clean and minimalist architectural appearance**
- **Accommodation for claddings up to 8mm on both sides provides greater flexibility for high-quality architectural door designs**
- **3D adjustment** enables precise side, height and compression alignment after installation
- **Up to 100kg load capacity** provides dependable support for suitable heavy-duty doors
- Compatible with **timber, steel and aluminium frames** for versatile specification
- **Individual connection adapter options** allow the energy transfer system to be configured for different requirements
- **Maintenance-free slide bearings** help minimise ongoing servicing requirements
- **180° opening angle** provides excellent opening capability where the installation permits
- **CE, IFT, UL and Certifire certification** provides documented product credentials

Technical Characteristics

- **Product Type:** 3D A8 Adjustable Concealed Hinge with Permanent Energy Transfer
- **Energy Transfer:** Permanent
- **Overall Length:** 200mm
- **Door Part Width:** 32mm
- **Frame Part Width:** 32mm
- **Load Capacity:** Up to 100kg
- **Door Type:** Unrebated Heavy-Duty Doors

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- **Frame Compatibility:** Timber, Steel & Aluminium
- **Maximum Cladding Thickness:** Up to 8mm on Both Sides
- **Side Adjustment:** +/- 3.0mm
- **Height Adjustment:** +/- 3.0mm
- **Compression Adjustment:** +/- 1.0mm
- **Bearing Type:** Maintenance-Free Slide Bearings
- **Minimum Door Thickness:** 49mm Including Claddings
- **Cutter Diameter:** 24mm
- **Collar Ring Diameter:** 30mm
- **Opening Angle:** 180°
- **Function Range:** Permanent Energy Transfer
- **Certification:** CE, IFT, UL & Certifire
- **Classification Standard:** EN 1935 / EAD
- **Classification Code:** 4 7 5 1* 1 1 — * 1 12

Applications

The **TECTUS ENERGY 3D A8 Adjustable Concealed Hinge** is designed for **unrebated heavy-duty doors** requiring discreet and permanent electrical connectivity. Suitable for compatible **timber, steel or aluminium frames**, it is particularly useful for architectural doors incorporating electrically powered or controlled components. Its combination of **permanent energy transfer, accommodation for claddings up to 8mm on both sides, precise 3D adjustment, 180° opening angle and up to 100kg load capacity** provides a sophisticated solution for demanding modern door installations.

Property	Value
Finish	Bronze Finish Dark
Opening angle (°)	180
Load Capacity (kg)	100
Width Door Part (mm)	32
Width Frame Part (mm)	32
Cutter diameter (mm)	24
Collar ring diameter (mm)	30
Min Door Thickness (mm)	49
Overall Length (mm)	200

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Property	Value
Certification	CE, IFT, UL & Certifire
Wire Cross Section	0.14 mm²
Max. Voltage (V)	50
No. of Wires	16
Max. Current (A)	0.8