

DAVIT ARM - GLASS
REPLACEMENT UNIT (GRU) |
WLL: 250KG

GGDGRU250

TECHNICAL SPECIFICATION

DAVIT ARM GLASS REPLACEMENT UNIT (GRU) | GGDGRU250

INTEGRATED HEAVY-DUTY FACADE MATERIAL HANDLING
SYSTEM

The **Davit Arm Glass Replacement Unit (GRU)** is a high-efficiency architectural maintenance and rigging assembly engineered specifically for handling glazing units and heavy cladding elements during building installation or replacement operations. Combining a lightweight, high-tensile structural aluminum boom layout with a high-torque electric winch setup, this system provides precise, smooth control over material handling at high altitudes.

SYSTEM OVERVIEW & ENGINEERING DESIGN

This consolidated data sheet details the complete mechanical and electrical parameters for the **GGDGRU250** system, integrating the structural crane configuration and its companion heavy-duty electric hoisting unit.

- Advanced Structural Metallurgy:** Built using high-strength Aluminum 6061/T6 for the primary upper boom, post, and monorail assemblies to significantly reduce self-weight, easing handling on rooftop setups while guaranteeing maximum structural stiffness.
- Robust Foundation Interfaces:** The turning components, fixed mount points, and oversized foundation base are forged from heavy-duty Hot-Dip Galvanized (HDG) Q345-B carbon steel to ensure rigidity against large structural overturning moments and extreme outdoor weathering.
- Integrated Turning Kinematics:** Equipped with a built-in heavy-duty rotating manual slewing interface ("Turning Kit") allowing for smooth pivot arcs during tight glass tracking maneuvers over roof edge boundaries.

TECHNICAL SPECIFICATIONS

1. STRUCTURAL & DIMENSIONAL PARAMETERS (DAVIT ARM)

STRUCTURAL PARAMETER	SPECIFICATION / MATERIAL MATRIX
Model Number	GGDGRU250 (Ref: CCG250-L1.5-H1.5)
Safe Working Load (SWL / WLL)	250 kg
System Reach / Outreach Outreach	1500 mm
Total System Height	1815 mm
Column Pivot Height	1599 mm
Davit Base Footprint Dimensions	400 mm x 400 mm
Column / Post Profile	Aluminum 6061/T6 (200 mm x 8 mm wall thickness)
Boom Configuration	High-Tensile Aluminum 6061/T6
Monorail Profile Dimension	Aluminum 6061/T6 (116 mm x 70 mm)
Fixed Mounting & Turning Hub	Hot-Dip Galvanized (HDG) Steel Q345-B
Base Material Base Composition	Hot-Dip Galvanized (HDG) Steel Q345

2. ELECTRICAL & POWER PARAMETERS (INTEGRATED HOIST WINCH)



ELECTRICAL PARAMETER	SPECIFICATION / PERFORMANCE METRIC
Power Drive Model Reference	Heavy-duty industrial series (500-1000 kg class)
Physical Dimensions (\$L \times W \times H\$)	\$60 \times 24 \times 26 \text{ cm}\$
Operational Supply Voltage	Three-Phase / 380V / 60Hz (3P/380V/60HZ)
Rated Power Output	3500 W
Effective Hoisting Height	0 to 30 meters range
Lifting Line Speed	10 meters per minute (10m/min)
Motor Insulation Rating	Class F
Ingress Protection Level	IP40

CORE SYSTEM ADVANTAGES

- High Strength-to-Weight Optimization:** The $200 \times 8 \text{ mm}$ structural aluminum post design minimizes architectural load impact on roofing systems, simplifying manual shifting and alignment between multiple pre-installed base sockets across floor layouts.
- Industrial-Grade Hoisting Power:** Driven by a premium 3500W, three-phase high-torque electric winch engine. This motor features Class F thermal insulation properties, providing high-cycle lifting speed stability (10m/min) over deep vertical drops up to 30 meters.
- Corrosion Protection Matrix:** Combining premium anodized structural alloys with hot-dip galvanized steel sub-assemblies creates an effective barrier against water intrusion, rust tracking, and atmospheric oxidation, maximizing product lifecycle longevity during outdoor construction phases.