

MDmax ST

低压开关柜 Low-voltage Switchgear

ABB 授权产品



产品概述

MDmax ST 低压开关柜为 ABB 公司授权品牌柜，是经过完全型式试验的组合式多功能低压开关柜，符合 GB7251.12 和 IEC60439-1 标准。电气及机械设计采用模块化原理，通过选用标准元件和标准组件，实现组柜方案的紧凑性、多样性和灵活性。主要适用于机场、发电厂、变电站、石油化工、冶金钢铁、交通能源、轻工纺织等厂矿企业和住宅小区、高层建筑等场所。作为交流 50 ~ 60Hz，额定工作电压交流 690V 及以下的电力系统的配电设备的电能转换、分配及控制之用。

环境条件

1. 短时最高温度：+ 40℃。
2. 24 小时最高平均温度：+ 35℃。
3. 最低温度：-5℃。
4. 设备在高于上述环境温度中使用时应降容运行。
5. 正常工作气候环境按 GB7251.12 和 IEC60439-1 标准的相关规定，周围环境相对湿度：40℃时为 50%。
6. 开关柜户内安装地点的条件应符合相应标准的要求。在会产生凝露的场所，开关柜里面会采用通风或加热等措施来防止凝露。如开关柜安装在高于海拔 2000 米以上，设备要相应降容运行。

Product Summary

MDmax ST low-voltage switchgear, one licensed brand of ABB Group, is combined type multi-functional one passing the complete type test, which meets the standards of GB7251.12 and IEC60439-1. Electric and mechanical project, based on the modular principle, makes the program of arks tightly, diversely and flexibly by using standard components.

It is mainly suitable for airport, power station, electric substation, petrochemical industry, metallurgic and steel industry, transportation energy, light and textile industry and other mine enterprises, residential districts and high-rise buildings. It is used to finish the transition, distribution and control of electric energy of the power distribution equipment in the electric system with AC 50-60 Hz and rated working voltage--below 690V (including 690V).

Environmental Conditions

1. Maximum temperature in short time + 40℃ .
2. Maximum average temperature in 24 hours + 35℃ .
3. Minimum temperature -5℃ .
4. The equipment should be used by reducing capacity when the environmental temperature is higher than above-mentioned one.
5. The climatic environment in normal operation is in accordance with relevant regulations of the standards of GB7251.12 and IEC60439, and the relative humidity of surroundings is 50% at 40℃ .
6. The conditions of indoor locations of switchgear should be in accordance with relevant standards. It shall take measures, such as ventilating or heating, to prevent condensation where the condensation was produced. The switchgear should be used by reducing capacity when it is installed in the height of over 2,000 meters.

产品特点

1. 骨架采用覆铝锌板双折边技术；
2. 水平母线区顶盖可以拆卸；
3. 具有抽屉式、可移开式、插入式三种功能单元；
4. 抽屉式结构，最高可装配 36 回路；
5. 在不降低防护等级的状态下，可实现抽屉回路的三位置转换；
6. 抽屉可移部位位置定位，可匹配声、光、字三种指示；
7. 完善的抽屉式电操回路解决方案；
8. 产品通过了内部燃弧耐受试验，运行安全可靠。

Product Features

1. The framework adopts the double folded technology with sheets coated with Al-Zn.
2. The header of the horizontal bus-bar could be dismantled.
3. There are three function units which are drawer type, plug-in type and portable type.
4. The drawer type structure can be equipped with as much as 36 loops.
5. It can complete the transition of drawer loop from one location to another two ones under the conditions of not reducing protection grade.
6. Removable parts of drawer can be positioned by matching the directions of sound, light and words.
7. Perfect solutions to Drawer type electric loop.
8. This device has passed internal arc duration test, and operating safety and reliability.

技术参数

Technical Parameters

标准 Standards	
通过型式试验的组装式开关柜 (TTA) Assembly Switchgear Passed the Modeling Test (TTA)	GB7251.1, IEC60439-1, EN60439.1, DIN_VDE0660, Part500, BS5486, UTE63-410
电气特性 Electrical Specifications	
额定电压 Rated Voltage	
额定绝缘电压 Rated Insulation Voltage	1,000VAC
额定工作电压 Rated Working Voltage	400V/690VAC
额定脉冲耐受压力 Uimp Rated Pulse Pressure Uimp	6/8/12kv
过电压等级 Over-voltage Level	III/IV
污染等级 Class of Pollution	3
额定工作频率 Rated Working Frequency	至 60Hz To 60Hz
额定电流 Rated Current Ie	
主母线 Main Bus-Bar	
额定电流 Rated Current Ie	至 6300A To 6300A
额定峰值耐受电流 Ipk Rated Peak Withstand Current Ipk	至 220ka To 220ka
额定短时耐受电流 Icw Rated Short-Time Withstand Current Icw	至 100ka To 100ka
配电母线 Distribution Bus-Bar	
额定电流 Rated Current Ie	至 2000A To 2000A
额定峰值耐受电流 Rated Peak Withstand Current	至 176A To 176A
额定短时耐受电流 Icw Rated Short-Time Withstand Current Icw	至 80KA To 80KA
防护等级及分隔形式 Class Of Protection & Divisional Form	
按 IEC60529 或 00P105004NID Divisions Oof Internal Cell According to IEC60529 And 00P105004NID	至 IP54 To IP54
内部小室分隔 Divisions of Internal Cell	至 4b To Form 4b
塑料零件 Plastic Parts	
无卤素、自熄 Halogen-Free, Self-Extinguish	DIN VDE0304 Part 3
无 CFC、自熄 No CFC, Self-Extinguish	IEC60707

开关柜结构尺寸及功能室

开关柜尺寸 Dimension (mm)	
推荐高度 Recommended Height	2200
推荐宽度 Recommended Width	400/600/800/1000/1200
固定式结构 Fixed Structure	600
抽屉式结构 Drawer Structure	600
推荐深度 Recommended Depth	1000/1200
抽屉式结构 Drawer Structure	600/800/1000/1200
可移式结构 Draw able Structure	600/800/1000/1200
插入式结构 Plug-in Structure	600/800/1000/1200
标准单元高度 Standard Cell Installation	
抽屉式 Drawer Structure	200/300/400/600
可移式 Draw able Structure	150/200/300
插入式 Plug-in Structure	150/200/300/400
标准安装模数间距 Standard Installation Module Interval	25

Structure Dimension and Sketch

开关柜的功能隔室 binet Functions of Switchgear

开关柜分为四个部分：
Depart into 4 Parts:

