

# RB Modules



## Applications

Grounding and wiring integration devices for commercial/military aircraft.

## Standards

## Characteristics

### Material

- Ground block body : aluminum alloy
- Feed back modules body : polyphenylene sulfide (PPS)
- Ground track body : PPS
- Ground block cap and insert : PPS
- Grommet and ground track strain : silicone rubber
- Relief grommet contact : copper alloy

### Protection

- Contact gold (1.27µm) over nickel (1,91 µm)

### Mechanical

- Magnetic permeability : materials do not exhibit a relative magnetic permeability of greater than 2, in accordance with MIL-T-81714, para 4.6.15



- Contact retention : size 16-20 : 88,9 N  
size 14-16 : 112,2 N
- Probe damage : in accordance with MIL-T-81714 para 4.6.2
- Endurance : 100 cycles of mating and unmating

### Electrical

- Contact resistance : size 16-20 : 9 mΩ  
size 14-16 : 5 mΩ
- Withstanding voltage : sea level : 1500 VRms in accordance with MIL-T 81714  
Altitude : 600 VRms in accordance with MIL-T 81714
- Insulation resistance : 5000 MΩ (feedback modules only)
- Insulation resistance : 50 MΩ after (elevated temperature) 1000 hours at 150°C feedback modules only

## Description

- RB series meet the electrical, mechanical and environmental performances criteria of MIL-J-81714.
- The system provides a large number of ground terminations within close proximity to signal wires («HERF» requirements).
- Modules available in five buss configurations and designed to accommodate # 16 and # 20 AWG cables terminated with M39029 contacts.
- Program switch module contains 2, 12 positions single pole, single throw DIP switches in a sealed compartment that is accessed by removing captured sealing plugs.
- Other switches such as SEDT, DPBT, DPST and 4PST can also be accommodate.

### Climatical

- Resistance to salt spray  
humidity  
vibration  
shock  
thermal shock  
temperature : 1000 hours at 150°C
- in accordance with MIL-T-81714

## Ordering information

### Ground & Mounting track, ground block, and feedback module

FCI Burndy Part number	Boeing Part number	Description
RBGB20-777 RBGB16-777	S280W555-1 S280W555-2	Ground block module - 16 x 20 AWG Ground block module - 12 x 16 AWG
RBTB20-2 RBTB20-4 RBTB20-8 RBTB16-3 RBTB16-6	S280W555-102 S280W555-104 S280W555-108 S280W555-203 S280W555-206	Terminal feedback module - 2 x 8 bus - 20 AWG Terminal feedback module - 4 x 4 bus - 20 AWG Terminal feedback module - 8 x 2 bus - 20 AWG Terminal feedback module - 3 x 4 bus - 16 AWG Terminal feedback module - 6 x 2 bus - 16 AWG
RBGT2 RBGT4 RBGT6 RBGT10 RBGT14 RBGT16 RBGT22 RBGT26	S280W555-502 S280W555-504 S280W555-506 S280W555-510 S280W555-514 S280W555-516 S280W555-522 S280W555-526	Terminal module ground track - 2.00 in. Terminal module ground track - 4.00 in. Terminal module ground track - 6.00 in. Terminal module ground track - 10.00 in. Terminal module ground track - 14.00 in. Terminal module ground track - 16.00 in. Terminal module ground track - 22.00 in. Terminal module ground track - 26.00 in.
RBMT2 RBMT4 RBMT6 RBMT10 RBMT14 RBMT16 RBMT22 RBMT26	S280W555-602 S280W555-604 S280W555-606 S280W555-610 S280W555-614 S280W555-616 S280W555-622 S280W555-626	Terminal module ground track - 2.00 in. Terminal module ground track - 4.00 in. Terminal module ground track - 6.00 in. Terminal module ground track - 10.00 in. Terminal module ground track - 14.00 in. Terminal module ground track - 16.00 in. Terminal module ground track - 22.00 in. Terminal module ground track - 26.00 in.
RBD20-1 RBD20-3	S280W555-751 S280W555-753	Terminal diode module - JANTX1N6818 Terminal diode module - JANTX1N5553
RBR20-2 RBR20-3 RBR20-4 RBR20-5	S280W555-702 S280W555-703 S280W555-704 S280W555-705	Terminal resistor module - RLR07C4301 FR Terminal resistor module - RLR07C1202 FR Terminal resistor module - RLR07C4992 FR Terminal resistor module - Mat disp brightness control
RBM20M-1DJ5 RBM18M-1DJ5 RBM16V-1DJ5 RBM12Z-1DJ5		M39029/1-101 pin contact - size 16-20 M39029/1 special pin contact - size 16-18 M39029/1-102 pin contact - size 14-16 M39039/1-103 pin contact - size 12-12

# RB Modules

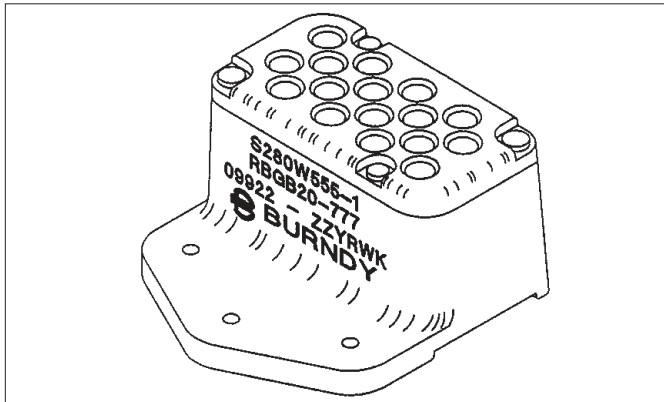


## Rack & panel and right angle mounting ground blocks and program switch module

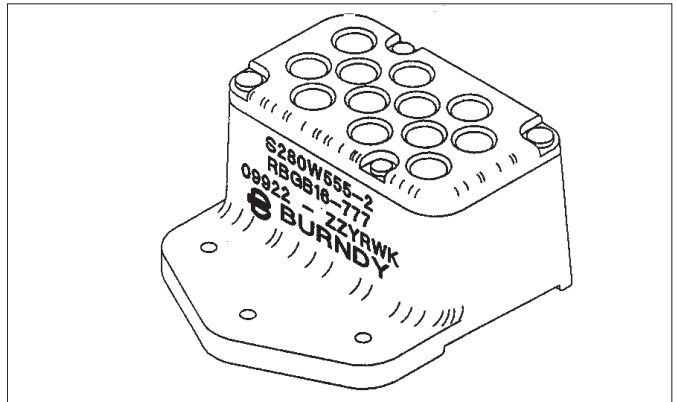
FCI Burndy Part number	Boeing Part number	Description
RBGP16-1 RBGP48-1 RBGP104-1		Rack and panel mounting ground block Rack and panel mounting ground block Rack and panel mounting ground block
RBGS16-1 RBGS32-1	S280W555-401 S280W555-402	Right angle mounting ground shelf strip Right angle mounting ground shelf strip
RBDSC-1		Program switch module

### Ground block assembly

P/N RBGB 20-777

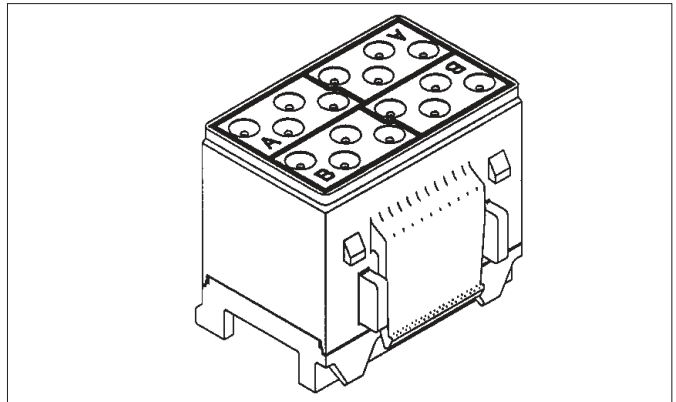
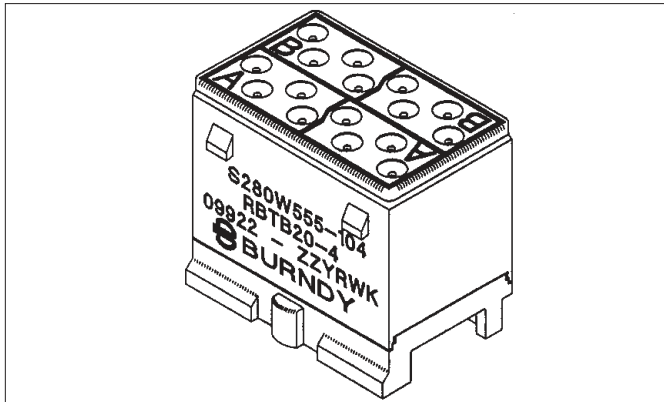


P/N RBG 16-777



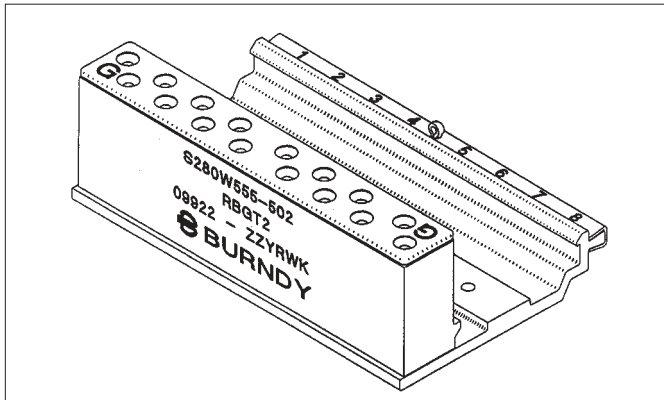
### Feedback module

P/N RBTB 20-4



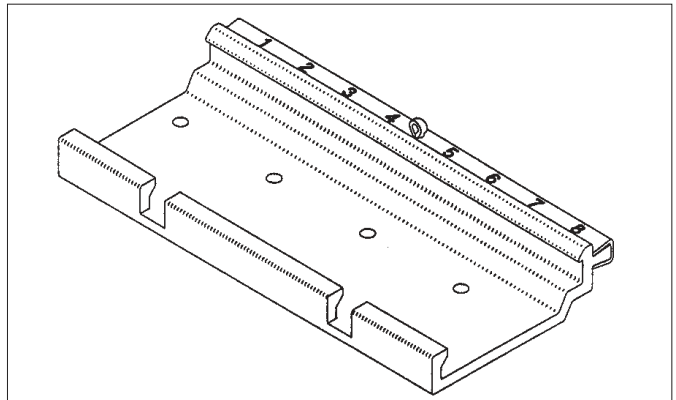
### Grounding track assembly

P/N RBGT 2



### Mounting track assembly

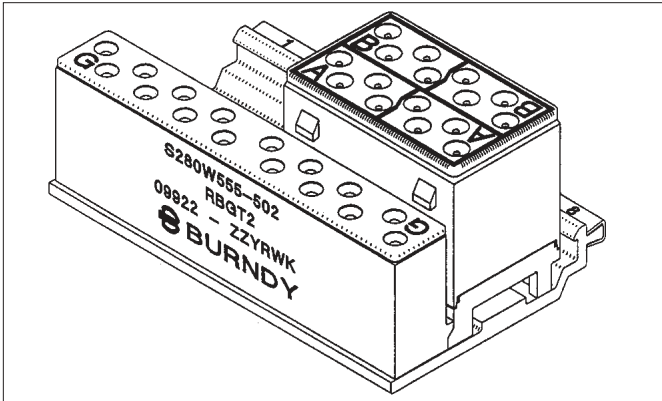
RBM T 2



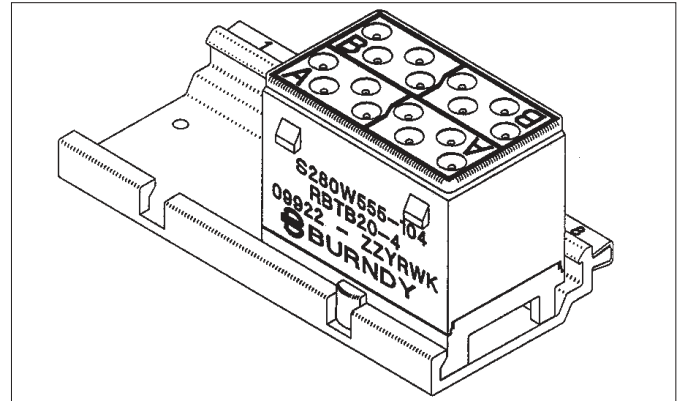
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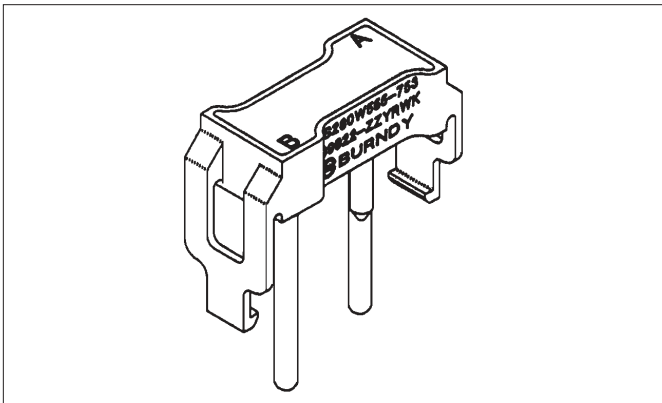
**Feedback module mounted in grounding track**  
RBG T 2 / RBT B 20 - 4



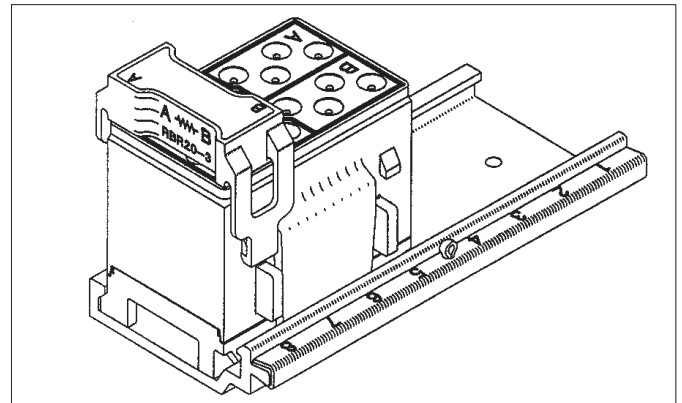
**Feedback module mounted in mounting track**  
RBM T 2 / RB T B 20 - 4



**Diode / resistor module assembly**  
RBD 20 - 3



**Feedback module mounted in track with resistor module**  
RBM T 2 / RBR 20 - 3 / RBT B 20 - 4



**Program switch module**  
RBDSC - 1

