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## Technical-Sales Information

**Number:** 1VCD850160  
**Division:** Electrification Products  
**Issued by:** AP-PM  
**Date:** 24 Marzo 2016  
**Title:** Introduction of new design tulip contacts on VD4, VM1 e S-VD4 50kA

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### Summary:

1. Introduction
  2. Benefits
  3. Pricelist
  4. Availability
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## 1. Introduction

The aim of the following Technical Information is to notify the sales network and customers the introduction of the new design tulip contact as standard supply on withdrawable breakers VD4 and VM1 and disconnecting trucks S-VD4 with rated voltage 12 kV and 17,5 kV, breaking capacity 50 kA and rated current up to 3150 A.



Old design tulip contact



New design tulip contact

## ABB S.p.A. Power Products Division

Unità Operativa Sace-MV

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### An ABB Group company

Capitale Sociale / Share Capital: € 107.000.000 - i.v. / fully paid up  
P. IVA / VAT: IT11988960156  
Codice Fiscale / Fiscal Code: 00736410150  
Registro of the Imprese of Milano / Official Company Book: 00736410150  
R.E.A. Milano: 1513225



## 2. Benefits

This new design represents an improvement of breaker technical performance in terms of draw-in/out load, which is lower with respect to the old design.

Moreover, the new design of tulip contacts represents the opportunity to unify the supply with the tulip contacts type currently used on withdrawable VD4 equipped with other poles.

The interchangeability with the previous design tulip contacts is guaranteed.

See ANNEX A for details on type testing.

This new design is also certified according to Standards IEC 62271-100/200.

## 3. Pricelist

No deviations due to this introduction are expected.

## 4. Availability

The new design tulip contact will be introduced in mass production according to the following schedule:

- 1250-1600 A for order loaded starting from July, 1<sup>st</sup> 2017
- 2000 A for order loaded starting from July, 1<sup>st</sup> 2017
- 2500-3150 A for order loaded starting from April, 17<sup>th</sup> 2017

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## **ANNEX A**

### **Introduction of new design tulip contacts on VD4, VM1 and S-VD4 with P7 poles 12-17.5kV, 1250...3150A, 50kA**

- **Dielectric Test**
  - Fixed version:
    - Not Applicable.
  - Withdrawable version:
    - OEM needs to repeat the test.
  - Withdrawable version with PowerCube:
    - Test already performed by ABB so no need to repeat.
  
- **Temperature rise test & measurement of the resistance of the main circuit**
  - Fixed version:
    - Not Applicable
  - Withdrawable version with OEM cassette/panel:
    - Test already performed by ABB in UniGear panel so no need to repeat
    - Due to the fact that the resistance of the breaker equipped with new tulip is equal or lower than the resistance of the breaker with the actual design, a temperature rise test valid for a breaker with the actual design is still valid.
  - Withdrawable version with PowerCube:
    - Test already performed by ABB in UniGear panel so no need to repeat
    - Due to the fact that the resistance of the breaker equipped with new tulip is equal or lower than the resistance of the breaker with the actual design, a temperature rise test valid for a breaker with the actual design is still valid.
  
- **STC test**
  - Fixed version:
    - Not Applicable
  - Withdrawable version:
    - Test to withstand the thermal stress and mechanical forces has been carried out on the breaker in UniGear. Furthermore, the panel has been able to withstand the test with new design tulip, therefore does not need to be repeated.
  - Withdrawable version with PowerCube:
    - Test to withstand the thermal stress and mechanical forces has been carried out on the breaker in UniGear and PowerCube. Furthermore, the panel has been able to withstand the test with new design tulip, therefore does not need to be repeated.



- **Making & Breaking test / single phase tests; double earth fault test**
  - Fixed version:
    - Not Applicable
  - Withdrawable version:
    - The introduction of the new tulips does not affect the pole and VI behavior. Therefore, the test valid for a breaker with the actual design is still valid.
  - Withdrawable version with PowerCube:
    - The introduction of the new tulips does not affect the pole and VI behavior. Therefore, the test valid for a breaker with the actual design is still valid.
- **Mechanical Lifetime test**
  - Fixed version:
    - Not Applicable
  - Withdrawable version:
    - The introduction of the new tulips does not affect the mechanical performance of frame and actuator. Therefore, the test valid for a breaker with the actual design is still valid.
  - Withdrawable version with PowerCube:
    - The introduction of the new tulips does not affect the mechanical performance of frame and actuator. Therefore, the test valid for a breaker with the actual design is still valid.
- **Capacitive switching**
  - Fixed version:
    - Not Applicable
  - Withdrawable version:
    - The introduction of the new tulips does not affect the pole and VI behavior. Therefore, the test valid for a breaker with the actual design is still valid.
  - Withdrawable version with PowerCube:
    - The introduction of the new tulips does not affect the pole and VI behavior. Therefore, the test valid for a breaker with the actual design is still valid.
- **Mechanical compatibility / Rack In-Out Test**
  - Fixed version
    - Not Applicable
  - Withdrawable version
    - Test already performed by ABB in UniGear panel so no need to repeat.
  - Withdrawable version with PowerCube:
    - Test already performed by ABB in UniGear panel so no need to repeat.