

## PRODUCT-DETAILS

# OTDC315FV22

## OTDC315FV22 DC Switch-disconnector



### Informations générales

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extension du type de produit | OTDC315FV22                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Code de produit              | 1SCA158295R1001                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| EAN                          | 6417019874005                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Description courte           | OTDC315FV22 DC Switch-disconnector                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Description longue           | <p>A fully optimized four-pole DC switch-disconnector for 1500V utility-scale photovoltaic power plants covering 315-630A current range. The new design offers both a size reduction and an increase in efficiency and performance to help manufacturers adapt to the industry's rapid adoption of 1500V DC solutions.</p> <p>The four-pole 1500V DC concept helps manufacturers improve system efficiency, reducing switch losses. The compact size of the new OTDC range makes it possible for manufacturers to reduce the size of combiner boxes and inverters.</p> <p>Main characteristics of this particular OTDC type:<br/>Disconnect double PV circuit, Approved according to IEC 60947-1, -3</p> |

### Valeur Circulaire

|                                                        |                                                                                           |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------|
| ABB EcoSolutions                                       | Oui                                                                                       |
| Principes du Design Circulaire - Taux de Recyclabilité | Conçu pour utiliser des ressources recyclables et réutilisables - Norme EN45555 - 59,09 % |
| Conflict Minerals Reporting Template (CMRT)            | 9AKK108467A5658                                                                           |
| Instructions relatives à la fin de vie                 | 1SCC301112M0201                                                                           |
| Environmental Product Declaration - EPD                | 1SCC301247D0201                                                                           |

|                                                              |                                                                                                                                     |
|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Déchets destinés à l'enfouissement en décharge - Destination | Déchet non-dangereux mis en décharge, lorsqu'il n'existe aucune autre alternative à moins de 100km d'un bâtiment - Atteint          |
| Amélioration de l'efficacité des ressources pour les clients | Efficacité du produit - Produit considéré comme plus économe en énergie par rapport à un produit similaire sur le marché. - Atteint |
| REACH Declaration                                            | 1SCC301240D0201                                                                                                                     |
| Informations RoHS                                            | 1SCC301239D0201                                                                                                                     |

## Eco Transparence

|                                         |                 |
|-----------------------------------------|-----------------|
| Environmental Product Declaration - EPD | 1SCC301247D0201 |
|-----------------------------------------|-----------------|

## Commande

|                  |              |
|------------------|--------------|
| Quantité minimum | 1 pièce      |
| Code douanier    | 85353010     |
| Pays d'origine   | Finland (FI) |

## Downloads Préférés

|                                         |                                                                                  |
|-----------------------------------------|----------------------------------------------------------------------------------|
| Fiche produit, informations techniques  | 1SCC301022C0201                                                                  |
| Instructions et manuels                 | 1SCC301099M0201<br>9AKK107492A6191                                               |
| Mechanical Drawings                     | OTDC315-630FV22_stp<br>OTDC315-630FV22_igs<br>1SCC307664F0001<br>1SCC307665F0001 |
| Wiring Diagram                          | 1SCC301035K0201                                                                  |
| Environmental Product Declaration - EPD | 1SCC301247D0201                                                                  |
| Instructions relatives à la fin de vie  | 1SCC301112M0201                                                                  |

## Dimensions

|                             |                     |
|-----------------------------|---------------------|
| Dimensions Cadre du produit | M                   |
| Produit Largeur Net         | 255.5 mm<br>10.1 in |
| Produit Hauteur Net         | 211 mm<br>8.3 in    |
| Produit Longueur Net        | 135 mm<br>5.3 in    |
| Poids net                   | 7.7 kg<br>16.9 lb   |

## Technique

|                                                    |                       |
|----------------------------------------------------|-----------------------|
| Configuration Connexion                            | Double circuit 4a, 4c |
| Rated Operational Current DC-21B (I <sub>g</sub> ) | (1500 V) 315 A        |
| Rated Operational Current DC-22B                   | (1500 V) 315 A        |
| Rated Operational Current DC-PV1                   | (1500 V) 315 A        |

|                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rated Operational Current<br>DC-PV2                              | (1500 V) 315 A                                                                                                                                                                                                                                                                                                                                                                                   |
| Courant thermique<br>conventionnel à l'air libre<br>( $I_{th}$ ) | $q = 40^{\circ}\text{C}$ 315 A                                                                                                                                                                                                                                                                                                                                                                   |
| Conventional Thermal<br>Current ( $I_{the}$ )                    | Fully Enclosed 315 A                                                                                                                                                                                                                                                                                                                                                                             |
| Tension assignée de<br>tenue aux chocs ( $U_{imp}$ )             | 12 kV                                                                                                                                                                                                                                                                                                                                                                                            |
| Tension assignée<br>d'isolement ( $U_i$ )                        | 1500 V                                                                                                                                                                                                                                                                                                                                                                                           |
| Tension                                                          | 1500 V                                                                                                                                                                                                                                                                                                                                                                                           |
| Rated Short-Circuit<br>Making Capacity ( $I_{cm}$ )              | (1500 V DC) 10 kA                                                                                                                                                                                                                                                                                                                                                                                |
| Courant assigné de courte<br>durée admissible ( $I_{cw}$ )       | (1500 V DC) 10 kA<br>for 1 s 10 kA                                                                                                                                                                                                                                                                                                                                                               |
| Power Loss                                                       | at Rated Operating Conditions per Pole 7...8 W                                                                                                                                                                                                                                                                                                                                                   |
| Degré de pollution                                               | 3                                                                                                                                                                                                                                                                                                                                                                                                |
| Handle Type                                                      | Handle and shaft not included                                                                                                                                                                                                                                                                                                                                                                    |
| Positive Opening<br>Operation Torque (Direct<br>Opening Action)  | 18 ... 30 N·m                                                                                                                                                                                                                                                                                                                                                                                    |
| Diamètre d'arbre                                                 | 12 mm<br>0.47 in                                                                                                                                                                                                                                                                                                                                                                                 |
| Switches Operating<br>Mechanism                                  | Mechanism Between the Poles<br>22 (Between the Poles)                                                                                                                                                                                                                                                                                                                                            |
| Position of Line Terminals                                       | Top In - Bottom Out<br>Bottom In - Top Out                                                                                                                                                                                                                                                                                                                                                       |
| Mode de fonctionnement                                           | Front Operated                                                                                                                                                                                                                                                                                                                                                                                   |
| Normes et standards                                              | IEC 60947-1, -3                                                                                                                                                                                                                                                                                                                                                                                  |
| Fonctions spéciales                                              | No                                                                                                                                                                                                                                                                                                                                                                                               |
| Type de montage                                                  | Base mounting                                                                                                                                                                                                                                                                                                                                                                                    |
| Number of Circuits                                               | 2                                                                                                                                                                                                                                                                                                                                                                                                |
| Nombre de pôles                                                  | 4                                                                                                                                                                                                                                                                                                                                                                                                |
| Indice de protection                                             | Front IP20                                                                                                                                                                                                                                                                                                                                                                                       |
| Type de borne                                                    | Lug terminals                                                                                                                                                                                                                                                                                                                                                                                    |
| Terminal Width                                                   | 30 mm<br>1.2 in                                                                                                                                                                                                                                                                                                                                                                                  |
| Couple de serrage                                                | Cable Lug 30 ... 44 N·m                                                                                                                                                                                                                                                                                                                                                                          |
| Durabilité mécanique                                             | 10000 cycle                                                                                                                                                                                                                                                                                                                                                                                      |
| Utilization                                                      | Photovoltaic                                                                                                                                                                                                                                                                                                                                                                                     |
| Utilization Category                                             | Switching of resistive loads, including moderate overloads - occasional<br>actuation (DC-21B)<br>Switching of mixed resistive and inductive loads, including moderate overloads<br>(i.e. shunt motors) - occasional actuation (DC-22B)<br>Switching of single PV string(s) without reverse and overcurrents (DC-PV1)<br>Switching of several PV string(s) with reverse and overcurrents (DC-PV2) |

## Technique UL/CSA

|                   |                         |
|-------------------|-------------------------|
| Couple de serrage | Cable Lug 30 ... 44 N·m |
|-------------------|-------------------------|

## Environnement

|             |                                                                        |
|-------------|------------------------------------------------------------------------|
| Statut RoHS | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |
|-------------|------------------------------------------------------------------------|

## Certificats et Déclarations (Numéro de document)

|                                            |                                    |
|--------------------------------------------|------------------------------------|
| CCC Certificate                            | CQC2019010302206498                |
| Déclaration de Conformité<br>- CE          | 1SCC301227D2701                    |
| Declaration of Conformity<br>- UKCA        | 1SCC301313D0201                    |
| DNV GL Certificate                         | 1SCC301231D0201                    |
| Environmental Product<br>Declaration - EPD | 1SCC301247D0201                    |
| Instructions et manuels                    | 1SCC301099M0201<br>9AKK107492A6191 |
| REACH Declaration                          | 1SCC301240D0201                    |
| Informations RoHS                          | 1SCC301239D0201                    |

## Emballage

|                                |                   |
|--------------------------------|-------------------|
| Emballage Niveau 1<br>Unités   | box 1 pièce       |
| Emballage Niveau 1<br>Largeur  | 270 mm<br>10.6 in |
| Emballage Niveau 1<br>Longueur | 310 mm<br>12.2 in |
| Emballage Niveau 1<br>Hauteur  | 200 mm<br>7.9 in  |
| Emballage Niveau 1 Poids       | 8 kg<br>17.5 lb   |
| Emballage Niveau 1 EAN         | 6417019874005     |

## Classifications

|                                   |                                                            |
|-----------------------------------|------------------------------------------------------------|
| Code de classification<br>d'objet | Q                                                          |
| ETIM 5                            | EC000216 - Switch disconnecter                             |
| ETIM 6                            | EC000216 - sectionneur de charge                           |
| ETIM 7                            | EC000216 - Switch disconnecter                             |
| ETIM 8                            | EC000216 - Switch disconnecter                             |
| ETIM 9                            | EC000216 - Switch disconnecter (low voltage)               |
| eClass                            | V11.1 : 27371403                                           |
| Catégorie DEEE                    | 5. Small Equipment (No External Dimension More Than 50 cm) |

## Catégories

Produits basse tension → Interrupteurs → DC Switch-Disconnectors

