Materials under scope of Naming convention

VSD

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Version	Description / Changes	Person	Date
Ver 2.2	First official version	Javier Conde / Htl	20.09.2014

EBM
Alignment for Success

1. **VSD**

   VSD (Variable Speed Drives) are used to control the speed of a motor in order to adapt it best to the operation range, as for example the speed of a fan.

   For the Naming Convention project, two groups where defined for VSD:

   - Electronic Modules with PCS 030907 (which are complete modules)
   - Electronic Components with PCS 030913 (which are single components used in VSD modules)

2. **030907 Electronic Modules**

   For the electronic modules, a closed list of Drive systems was defined to be managed in Virtual Warehouse Naming Convention.

ACS_1000
ACS_800
ACS_600
SIMCODE
SINAMICS
ROBICON
SIMOVERT
SCHNEIDER

   The classification of the parts is not easy as each drive system has a specific modell number, including in this number a lot of detail.

   The list of characteristics defined for the classification of the VSD is according to the Naming Convention Project and will be explained in the next chapters:

030907_VW

Characteristic Name	Commodity	VSD System	Spare Part Group	Module Type	Module option 1	Module option 2	Module option 3
Characteristic Technical Name	ZNC_COMMODITY	ZNC_VSD_DRIVE_SYSTEM	ZNC_VSD_SPARE_PARTS_MODULE	ZNC_VSD_MODULE_TYPE	ZNC_MODULE_OPTION_1	ZNC_MODULE_OPTION_2	ZNC_MODULE_OPTION_3
030907	M	O	O	O	O	O	O
030907_VW	M	M	M	M	M	M	M
Data type	Char	Char	Char	Char	Char	Char	Char
Number of Charts	30	15	15	30	30	30	30
Decimal places	0	0	0	0	0	0	0
Unit							

VSD System	Serial number module type	Drive type	Drive option 1	Drive option 2	Drive option 3	Serial Number drive type	Remark	Warehouse Type
ZNC_VSD_DRIVE_SYSTEM	ZNC_VSD_SERIAL_NUMBER	ZNC_VSD_DRIVE_TYPE	ZNC_DRIVE_OPTION_1	ZNC_DRIVE_OPTION_2	ZNC_DRIVE_OPTION_3	ZNC_VSD_SERIAL_NUMBER_DR	ZNC_VSD_REMARK	ZNC_WAREHOUSE
O	O	O	O	O	O	O	O	M
M	M	M	M	M	M	M	O	M
Char	Char	Char	Char	Char	Char	Char	Char	Char
15	30	30	30	30	30	30	30	2
0	0	0	0	0	0	0	0	0

Below you can find a description of each of the characteristics

- **Commodity – Fixed value**

The commodity will be a value fixed "VSD MOD" for this PCS

- **VSD System – Mandatory for VW**

Is the specific drive module. This characteristic usually combines the producer/manufacturer and the model of the VSD. Below you can find some of the models defined for VW:

VSD Drive System	Abbrev
ABB ACS 1000	ACS_1000
ABB ACS 800	ACS_800
ABB ACS 600	ACS_600
Siemens Simcode	SIMCODE
Siemens Sinamics	SINAMICS
Siemens Robicon	ROBICON
Siemens Simovert	SIMOVERT
Schneider	SCHNEIDER

- **Spare part group – Mandatory in VW**

Inside each category, we can find different types of modules, depending on the functionality and specifications of the objects. In this characteristic we will indicate the group to which it belongs. In the modules we can find two types:

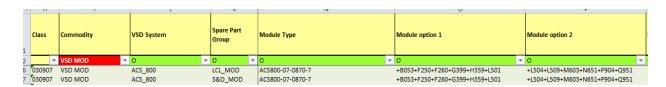| Group of spare parts Modules	Abbrev
Supply and Drive Module	S&D_MOD
LCL-Filter Module	LCL_MOD

- **VSD Module type – Mandatory in VW**

The VSD module type consists a lot of numbers and letters. As the classification system does not allow more than 40 characters in one characteristic, three fields were defined to introduce the complete specification. "Module Type" "Module Option 1" "Module Option 2" and "Module Option 3". Module Option 1 is used to define the drive type. Option 2 and 3 for the rest of codes.

The original module type looks like:

In order to split the specification the distribution is done in the following way:

With this approach it is possible to get the complete range of numbers and letters.

- **Serial Number Module Type – Mandatory in VW**
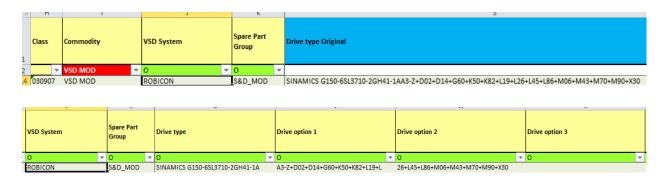
Serial number of the electronic module is provided by the company.

- **Drive Type – Mandatory in VW**

If a complete drive (consisting of different modules)is available the approach is exactly the same as for the modules.

The drive coding can have a lot of different numbers and letters. Also in this case the complete denomination is split in different characteristics.

Class	Commodity	VSD System	Spare Part Group	Drive type Original
	VSD MOD	O	O	
030907	VSD MOD	ROBICON	S&D_MOD	SINAMICS G150-6SL3710-2GH41-1AA3-Z+D02+D14+G60+K50+K82+L19+L26+L45+L86+M06+M43+M70+M90+X30

VSD System	Spare Part Group	Drive type	Drive option 1	Drive option 2	Drive option 3
O	O	O	O	O	O
ROBICON	S&D_MOD	SINAMICS G150-6SL3710-2GH41-1A	A3-Z+D02+D14+G60+K50+K82+L19+L	26+L45+L86+M06+M43+M70+M90+X30	

- **Serial Number Drive Type – Mandatory in VW**

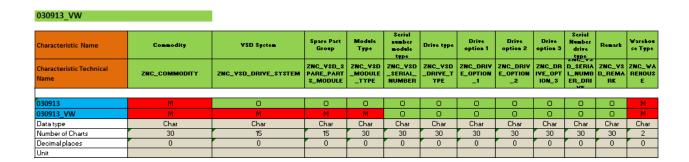The drive have a unique serial number which should be introduced in this field.

- **Remark**

Remark can be used for free text.

3. 030907 Electronic Components

For the electronic components, there was a closed list of Systems defined to be included in the Virtual Warehouse, the procedure is the same as for modules.

The list of characteristics defined for the classification of the electronic components is according to the Naming Convention Project and will be explained below.

030913_VW

Characteristic Name	Commodity	VSD System	Spare Part Group	Module Type	Serial number module type	Drive type	Drive option 1	Drive option 2	Drive option 3	Serial Number drive type	Remark	Warehouse Type
Characteristic Technical Name	ZNC_COMMODITY	ZNC_VSD_DRIVE_SYSTEM	ZNC_VSD_SPARE_PARTS_MODULE	ZNC_VSD_MODULE_TYPE	ZNC_VSD_SERIAL_NUMBER	ZNC_VSD_DRIVE_TYPE	ZNC_DRIVE_OPTION_1	ZNC_DRIVE_OPTION_2	ZNC_DRIVE_OPTION_3	ZNC_VSD_SERIAL_NUMBER_DRIVE_TYPE	ZNC_VSD_REMARK	ZNC_WAREHOUSE
030913	M	O	O	O	O	O	O	O	O	O	O	M
030913_VW	M	M	M	M	O	O	O	O	O	O	O	M
Data type	Char	Char	Char	Char	Char	Char	Char	Char	Char	Char	Char	Char
Number of Charts	30	15	15	30	30	30	30	30	30	30	30	2
Decimal places	0	0	0	0	0	0	0	0	0	0	0	0
Unit												

The main characteristic that will vary in this case is the "Spare Part Group"

- **Spare Part Group – Mandatory**

The spare part group indicates the type of component the material belongs to. Below you can find a table of possible values, defined during the VW project:

Group of spare parts Components	Abbrev	Group of spare parts Components	Abbrev
Capacitor	CAP	Optical Distribution	OPT_DIS
Coated Board	C_BRD	Power Supply	PS
Common Mode Filter	C_M_FIL	PPCS Datalogg	PPCS_DA
Control Panel	CTR_PAN	Protection Board	PRO_BRD
DDCS Communication	DDCS_CO	Resistor	RESIST
Drive Control Unit	DRV_CON	Switch Fuse Controller	SWT_F_C
du/dt Filter	DU/DT_F	Varistor Board	VAR_BRD
Earth Fault Relais	ETH_FAL	Bus Kit	BUS_KIT
Emergency Relais	EMERG_R	Circuit breaker	C_BREAK
Fan	FAN	Current transducer	CUR_TRANS
Fuse	FUSE	Measurement board	MES_BRD
I/O Extension Unit	I/O_ EXT	Thyristor/Diode Kit	THYR_DIO
Interface Board	INT_BRD	IGBT_Kit	IGBT
Main Contactor	CONTACT	Remote monitoring	REM_MONI
Encoder interface	ENCODER	Choke	CHOKE
		Transformer	TRAFO

- **Module Type – Mandatory**

For description refer to the previous chapter for module / drives

The other characteristics are optional but follow the same rules as described in the previous chapter.

4. Naming convention in material description

A specific language in SAP was developed to generate the material descriptions of the materials with Naming Convention, this language is called "Z2". When a material is created, a standard description in Z2 language is generated automatically, based on the different characteristics.

The fields that complete the "Short description" and "Long description" in the VSD are as follows:

030907

Short Description:

<Commodity>

Long Description:

<Commodity>;<Spare part group>;<Module type>;<Module Option>;<Drive system>;<Serial number>;<Drive type>;<Drive Option>;<Serial number drive>;<VSD remark>; <warehouse type>;

Short Description:

VSD MOD

Long Description:

VSD MOD S&D_MOD ACS800V401-0040-3 ACS_800 ACS800-01-0040-3 1042702481 ST

030913

Short Description:

<Commodity>

Long Description:

<Commodity>;<VSD system>;<Spare part group>;<Module type>;<Serial number>;<Drive type>;<Drive Option>;<Serial number drive>;<VSD remark>; <warehouse type>;

Short Description:

VSD COMP

Long Description:
VSD COMP ACS_800 INT_BRD AINT-14C 68685826 VW