PlcOperand Class

Namespace: IPS7Lnk.Advanced
Assemblies: IPS7LnkNet.Advanced.dll

Represents an operand which addresses a specific memory block within a programmable logic controller (PLC).

C#

```
[Serializable]
public class PlcOperand : PlcIdentity, IComparable, ISerializable, IEquatable<PlcOperand>,
IComparable<PlcOperand>
```

Inheritance Object › PlcIdentity › PlcOperand

Derived

- PlcCounterOperand
- PlcDataBlockOperand
- PlcFlagOperand
- PlcInputOperand
- PlcOutputOperand
- PlcPeripheryInputOperand
- PlcPeripheryOutputOperand
- PlcTimerOperand
- PlcUserDefinedTypeOperand

Attributes SerializableAttribute

Implements IComparable, Serialization.ISerializable, IEquatable<PlcOperand>, IComparable<PlcOperand>

Constructors

Name	Description
PlcOperand(PlcOperandType)	Initializes a new instance of the PlcOperand class using the `type` specified.
PlcOperand(PlcOperandType, Int32)	Initializes a new instance of the PlcOperand class using the `type` and `number` specified.
PlcOperand(Serialization.SerializationInfo, Serialization.StreamingContext)	Initializes a new instance of the PlcOperand class with serialized data.

Fields

Name	Description
MaxNumber	Specifies the maximum value that can be assigned to the Number property.

Name	Description
MinNumber	Specifies the minimum value that can be assigned to the Number property.

Properties

Name	Description
Counter	Gets the operand used to access the counter memory block of the controller.
Flag	Gets the operand used to access the flag memory block of the controller.
Input	Gets the operand used to access the input memory block of the controller.
Number	Gets the number associated with the operand.
OriginalString	Gets the original string from that the operand was created.
Output	Gets the operand used to access the output memory block of the controller.
PeripheryInput	Gets the operand used to access the peripheryInput memory block of the controller.
PeripheryOutput	Gets the operand used to access the peripheryOutput memory block of the controller.
Standard	Gets a value indicating which PlcOperandStandard was used to create the operand.
Timer	Gets the operand used to access the timer memory block of the controller.
Type	Gets the type of operand represented.

Methods

Name	Description
All	Retrieves all PlcOperand instances which can be typically addressed within a PLC including the custom data block operands used so far.
CompareTo(Object)	Compares the current PlcOperand with the `other`.
CompareTo(Object)	Compares the current PlcIdentity with the `other`. (Inherited from PlcIdentity)
CompareTo(PlcOperand)	Compares the current PlcOperand with another PlcOperand.
DataBlock(Int32)	Retrieves the according PlcDataBlockOperand using the specified `number` of the data block operand.
Equals(Object)	Determines whether the specified `other` is equal to this PlcOperand.
Equals(Object)	Determines whether the specified `other` is equal to this PlcIdentity. (Inherited from PlcIdentity)
Equals(PlcOperand)	Determines whether the specified `other` is equal to this PlcOperand.
GetHashCode	Retrieves a hash code for this PlcOperand.
GetHashCode	Retrieves a hash code for this PlcIdentity. (Inherited from PlcIdentity)
GetObjectData(Serialization.SerializationInfo, Serialization.StreamingContext)	Sets the Serialization.SerializationInfo with information about the exception.
GetObjectData(Serialization.SerializationInfo, Serialization.StreamingContext)	Sets the Serialization.SerializationInfo with information about the exception. (Inherited from PlcIdentity)
GetSupportedRawTypes(PlcOperandType)	Retrieves the PlcRawType members supported by the PlcOperandType specified by `type`.

Name	Description
IsSupported(PlcOperandType, PlcRawType)	Determines whether the specified `rawType` can be used to address the PLC memory identified by the PlcOperandType specified by `type`.
Of(PlcOperandType)	Retrieves the according PlcOperand which matches the PlcOperandType specified.
Parse(String)	Converts an operand string to a PlcOperand instance.
ToString	Converts the operand to its string representation.
ToString	Converts the name to its string representation. (Inherited from PlcIdentity)
ToString(PlcOperandStandard)	Converts the operand to its string representation using the specified `standard`.
TryParse(String, PlcOperand@)	Determines whether a string is a valid operand.
UserDefinedType(Int32)	Retrieves the according PlcUserDefinedTypeOperand using the specified `number` of the user defined type operand.

Operators

Name	Description
op_Equality(PlcIdentity, PlcIdentity)	Returns a value indicating whether two instance of PlcIdentity are equal. (Inherited from PlcIdentity)
op_Equality(PlcOperand, PlcOperand)	Returns a value indicating whether two instance of PlcOperand are equal.
op_GreaterThan(PlcIdentity, PlcIdentity)	Determines whether the first specified PlcIdentity object is greater than the second specified PlcIdentity object. (Inherited from PlcIdentity)
op_GreaterThan(PlcOperand, PlcOperand)	Determines whether the first specified PlcOperand object is greater than the second specified PlcOperand object.
op_GreaterThanOrEqual(PlcIdentity, PlcIdentity)	Determines whether the first specified PlcIdentity object is greater than or equal to the second specified PlcIdentity object. (Inherited from PlcIdentity)
op_GreaterThanOrEqual(PlcOperand, PlcOperand)	Determines whether the first specified PlcOperand object is greater than or equal to the second specified PlcOperand object.
op_Implicit(Advanced.PlcIdentity)	Converts a string formatted as name to an PlcIdentity object. (Inherited from PlcIdentity)
op_Implicit(Advanced.PlcOperand)	Converts a string formatted as operand to an PlcOperand object.
op_Inequality(PlcIdentity, PlcIdentity)	Returns a value indicating whether two instances of PlcIdentity are not equal. (Inherited from PlcIdentity)
op_Inequality(PlcOperand, PlcOperand)	Returns a value indicating whether two instances of PlcOperand are not equal.
op_LessThan(PlcIdentity, PlcIdentity)	Determines whether the first specified PlcIdentity object is less than the second specified PlcIdentity object. (Inherited from PlcIdentity)

Name	Description
op_LessThan(PlcOperand, PlcOperand)	Determines whether the first specified PlcOperand object is less than the second specified PlcOperand object.
op_LessThanOrEqual(PlcIdentity, PlcIdentity)	Determines whether the first specified PlcIdentity object is less than or equal to the second PlcIdentity object. (Inherited from PlcIdentity)
op_LessThanOrEqual(PlcOperand, PlcOperand)	Determines whether the first specified PlcOperand object is less than or equal to the second PlcOperand object.

Table of Contents

Constructors 1
Fields 1
Properties 2
Methods 2
Operators 3