

Package ‘Relexon’

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Type Package

Title Explore the UK's National Power Grid Datasets

Version 0.2.1

Author Phil Hunter

Maintainer Phil Hunter <philhunter93@live.co.uk>

Description The purpose of 'Relexon' is to allow R users to pull data from the UK's Balancing Mechanism Reporting Service, otherwise known as 'Elexon', using the 'BMRS' API <<https://www.bmreports.com/bmrs/?q=help/about-us>>. This can range from different types of electricity generation, how much electricity is used in a 5-minute period, imports, temperatures and forecasts. Users will require an 'Elexon' key, which are freely available by registering at <<https://www.elexonportal.co.uk>>.

License GPL-3

Depends R (>= 2.10)

Imports readr

Encoding UTF-8

LazyData true

RoxygenNote 6.1.1

NeedsCompilation no

Repository CRAN

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`elexonData`*elexonData*

Description

This function pulls data from Elexon/BMRS, given a user's key, start and end dates and the dataset in question. Please note: it does not matter if BMRS requires the dates to be in a different format to "yyyy-mm-dd". The Relaxon package will take care of this. Just enter the dates in the usual format!

Usage

```
elexonData(dataset = "ROLSYSDM", key, from = Sys.Date() - 2,  
           to = Sys.Date() - 1, test = FALSE)
```

Arguments

<code>dataset</code>	The dataset you are pulling from BMRS/Elexon.
<code>key</code>	Your personal scripting key from elexon. Find out more at https://www.elexonportal.co.uk
<code>from</code>	This is the start date/datetime of the dataset.
<code>to</code>	This is the end date/datetime of the dataset.
<code>test</code>	This is set to FALSE by default. Set this argument to TRUE if you want to use the test version of the API. It comes in handy if you are pulling the same datasets repeatedly without getting warnings from Elexon.

Examples

```
## Not run:  
elexonData(  
  "ROLSYSDM",  
  key = "948ghmgpe",  
  from = "2018-01-01",  
  test = TRUE  
)  
  
## End(Not run)
```

`elxonDynamic`

elxonDynamic

Description

This function pulls dynamic data from Elexon/BMRS, given a user’s key, start and end dates. The data returned are given in a list due to their varying column lengths, separated by each item.

Usage

```
elxonDynamic(key, from = Sys.Date() - 60, to = Sys.Date() - 59,
             test = TRUE)
```

Arguments

- `key` Your personal scripting key from elxon. Find out more at <https://www.elxonportal.co.uk>
- `from` This is the start date/datetime of the dataset
- `to` This is the end date/datetime of the dataset
- `test` This is set to TRUE by default. Set this argument to FALSE if you want to use the live version of the API.

Examples

```
## Not run:
elxonDynamic(
  key = "948ghmgpe",
  from = "2018-01-01",
  to = "2019-01-01",
  test = TRUE)

## End(Not run)
```

`elxonList`

elxonList

Description

This simply gives a list of all the datasets you can pull from Elexon/BMRS

Usage

```
elxonList()
```

Examples

```
## Not run:
elexonList()
## End(Not run)
## Not run:
View(elexonList())

## End(Not run)
```

<code>elexonPhysical</code>	<i>elexonPhysical</i>
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Description

This function pulls physical data from Elexon/BMRS, given a user's key, start and end dates. All half-hourly periods are used, accounting for daylight savings as well. The test parameter is set to TRUE by default, as datasets ranging more than a mere week will result in pulling very large datasets.

Usage

```
elexonPhysical(key, from = Sys.Date() - 20, to = Sys.Date() - 19,
  test = TRUE)
```

Arguments

<code>key</code>	Your personal scripting key from elexon. Find out more at https://www.elexonportal.co.uk
<code>from</code>	This is the start date/datetime of the dataset
<code>to</code>	This is the end date/datetime of the dataset
<code>test</code>	This is set to TRUE by default. Set this argument to FALSE if you want to use the live version of the API.

Examples

```
## Not run:
elexonPhysical(
  key = "948ghmgpe",
  from = "2018-01-01",
  to = "2019-01-01",
  test = TRUE)

## End(Not run)
```

`elexonURL`*elexonURL*

Description

This function gives either a single URL or many URLs that can be used to download csv files manually. Please note: it does not matter if BMRS requires the dates to be in a different format to "yyyy-mm-dd". The Relexon package will take care of this. Just enter the dates in the usual format!

Usage

```
elexonURL(dataset = "ROLSYSDM", key, from = Sys.Date() - 2,  
          to = Sys.Date() - 1, test = FALSE)
```

Arguments

<code>dataset</code>	The dataset you are pulling from BMRS/Elexon.
<code>key</code>	Your personal scripting key from elexon. Find out more at https://www.elexonportal.co.uk
<code>from</code>	This is the start date/datetime of the dataset
<code>to</code>	This is the end date/datetime of the dataset
<code>test</code>	This is set to FALSE by default. Set this argument to TRUE if you want to use the test version of the API.

Examples

```
## Not run:  
elexonURL(  
  "HHFUEL",  
  key = "948ghmgpe",  
  from = "2018-01-01",  
  to = "2018-01-05",  
  test = TRUE  
)  
  
## End(Not run)
```

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